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OBSERVATIONS

AT THE

— MAGNETIC AND METEOROLOGICAL OBSERVATORY,

AT THE

GIRARD COLLEGE, PHILADELPHIA, *Pa.* 1

MADE UNDER THE DIRECTION OF

Alexander Dallas
A. D. BACHE, LL. D.

AND WITH FUNDS SUPPLIED BY THE MEMBERS OF THE AMERICAN
PHILOSOPHICAL SOCIETY, AND BY THE TOPOGRAPHICAL
BUREAU OF THE UNITED STATES,

1840 to 1845.

PRINTED BY ORDER OF THE SENATE OF THE UNITED STATES, AND UNDER THE
DIRECTION OF THE TOPOGRAPHICAL BUREAU.

WASHINGTON:
GALES AND SEATON, PRINTERS.

1847.

Sci 785.15

Handwritten text, possibly a signature or title, appearing as "Sci 785.15" in a cursive script.

PREFACE.

PRELIMINARY REMARKS.

The Magnetic Observatory at the Girard College was erected in 1838, through the liberality of the Building Committee of the Councils* of the city of Philadelphia, and was intended to afford a suitable place for using the magnetic instruments purchased under the direction of the Trustees of the College.

In this year, a system of magnetic and meteorological observations was commenced, in pursuance of the recommendation of the British Association for the advancement of science, and a great union formed, which finally embraced more than thirty observatories, in the four quarters of the globe, carrying on simultaneous observations upon the same plan and with similar instruments.

It was desirable that the Observatory at the Girard College should take part in this movement, and liberal and enlightened individuals were soon found to provide the funds necessary for executing the required observations,† which were accordingly commenced in May, 1840. Subsequently, in 1841, the American Philosophical Society of Philadelphia became responsible for this continuance, and either directly, or through the contributions of their members, supported the establishment until December, 1842. After a short suspension of the regular observations, they were resumed in May, 1843, for the use of the Topographical Bureau of the War Department, by order of the Hon. James M. Porter, Secretary of War, and through the recommendation of Col. J. J. Abert, of the Topographical Engineers. The results were reported to the Topographical Bureau from this time until the closing of the Observatory in June, 1845.

In the spring of 1845, the observations of nearly five years had accumulated and remained unpublished. A call was made by the Senate of the United States‡ for a report, and directions given for their publication, to include also the records up to the close of the observatory year.

The observations were made under my immediate direction until my removal from Philadelphia, in December, 1843, when Professor John F. Frazer, of the University of Pennsylvania, took this charge, its general superintendence merely remaining with me. It is perhaps due to both Professor Frazer and to myself to say, that these duties were gratuitously performed.

*The Committee to whom this act of liberality is due, consisted of James Hutchinson, Chairman, Messrs. Wiegand, Elliot, Tiers, Roach, Anderson, Lindsay, and Winebrenner.

†The names of these gentlemen who at first bore nearly all, and afterwards a considerable part of the expenses of the Observatory, are Nicholas Biddle, Richard Price, Thomas Biddle, Dr. Chapman, Dr. R. M. Patterson, John K. Kane, Dr. George B. Wood, B. W. Richards, Dr. C. D. Meigs, and J. F. Frazer.

‡On motion of Senator Jabez W. Huntington, of Connecticut. As this is passing through the press, (November, 1847,) this able Senator and excellent friend of science has been suddenly arrested in his career of usefulness by death; a loss to the councils of his country, an irreparable loss to his friends.

As during the progress of the observations, I was engaged in laborious duties, requiring the absolute devotion of a very great portion of my time, I trust that many omissions and irregular performances of duty in directing the observations thus accounted for, will be excused. I must further plead the pressure of absorbing engagements and necessary absence from the place of publication, in excuse for errors which may occur in the course of the following publication of the records of observation. Upon the task of comparison of and deduction from the observations, I have not presumed, under present circumstances, even to enter; but have been obliged to be satisfied with superintending the reduction of the results, and directing such general comparisons as can be made under general instructions.

The final computations have been made by my young friend, Mr. Joseph S. Ruth, (now of the Coast Survey,) who personally took a part in the observations, and in whose faithfulness and intelligence I have great confidence. Whoever has endeavored to insure accuracy in numerous computations like these, knows how difficult Mr. Ruth's task has been, and will give him credit for the zeal and perseverance with which the work has been executed, rather than criticise accidental errors which may remain in it. A list of all such errata as have been found in the course of comparisons, and a general review of the work, has been given by Mr. Ruth, at the close of this preface. The curves printed with the observations have also all been prepared by Mr. Ruth.

FIRST ASSISTANTS, AND TIME EMPLOYED.

1. Prof. J. F. Frazer
2. Prof. R. S. McCulloh
3. Prof. W. Chauvenet October 14, 1840, to December 18, 1840.
4. Solon W. Hall December 18, 1840, to April 7, 1843.
5. Howard S. Correy April 7, 1843, to June 16, 1844.
6. Wm. H. Rihl June 16, 1844, to October 2, 1844.
7. J. B. Reynolds October 2, 1844, to June 30, 1845.

SUB-ASSISTANTS, AND TIME EMPLOYED.

William Uhler	May, 1840, to September 9, 1840.
Hall Grandgent	May, 1840, to October 17, 1840.
Archibald McLean	July 6, 1840, to October 7, 1840.
Hugh Mason	October 17, 1840, to May 24, 1841.
Rufus Chadwick	December 19, 1840, to May 2, 1843.
Samuel McCutcheon	December 16, 1840, to December 31, 1842.
Joseph S. Ruth	September 17, 1841, to April 19, 1843.
James Kirkpatrick	October 5, 1841, to September 3, 1842.
George Davidson	December 29, 1842, to June 20, 1845.

The following Sub-Assistants were employed from time to time :

C. Cramp,	J. Ricketts,
A. Laidlaw,	C. Schlater,
W. Stephens,	W. Caldwell,
G. Correy,	J. Hewston,
E. S. Hall,	J. Sutton,
A. Magillton,	J. Lynd,

PREFACE.

v

W. Hunter,
J. S. Hedges,
R. M. Martin,
J. S. Lawson,
G. Gideon,

G. Chadwick,
L. Houpt,
C. Bowman,
T. Souder,
F. McCrellish,

ABSTRACTS.

The abstracts were made out at the Observatory by

Prof. W. Chauvenet . . . May, 1840, to June, 1841.

Joseph S. Ruth . . . April, 1843, to March, 1844.

George Davidson . . . March, 1844, to June, 1845.

DESCRIPTION OF THE OBSERVATORY.

The position of the Magnetic Observatory was in $39^{\circ} 58' 17''$ north latitude, and $75^{\circ} 10' 44''$ longitude west of Greenwich.

It was a wooden building, resting upon a granite foundation. The soil, a reddish gravel, was excavated to the depth of about four feet, for the foundations. Iron was carefully excluded from every part of the building; the nails used were of copper, the locks, hinges, &c., were of brass. The Observatory was built by James O. Sawyer, master carpenter at the Girard College, who labored to make every part of it suitable to the purposes for which it was intended. In the setting up and adjusting the instruments, Mr. Sawyer's skill in manipulation rendered me important assistance. The arrangement of the rooms will be seen by reference to the drawing. The large room, containing the magnetic instruments, was thirty-nine feet and two inches in length, and nineteen feet four inches in width. The computing room, containing the anemometer, was fourteen feet and two inches in length, and nine feet and ten inches in width. The small room adjoining this, which was used by the observers as a sleeping apartment, was of the same length as the latter, and was four feet in width. The partitions and walls of the building were one foot in thickness. The floor was one foot and a half above the ground, and the ceiling about thirteen feet above the floor. The trussed roof was capped by a trap-door, extending nearly half of the length of the building, which being opened, secured the means of adjusting the transit instrument on the meridian. The longer sides of the building were in the direction of the magnetic meridian of 1839. The doors and windows of the Observatory were double, to prevent currents of air from affecting the instruments. As another security against currents of air in the Observatory, it was the intention, at first, to have no fire except in the computing room, where the flue from the grate passed through a massive pier of masonry, preventing any radiation of heat to the observing room. The great differences of temperature which this caused, and the complaints by the observers of their hardships, thus occasioned, induced me to believe that the currents of air that would be produced by a fire, would be the less evil. Accordingly, in November, 1841, a stove of soapstone was placed in the observing room, the pipe and other accessories being of copper. The pipe passed, at a distance of about six feet, above the declinometer, and to the south of it, through the partition, into the flue before spoken of. Anthracite coal was burned. Experiments were made to discover if currents of air were occasioned by

this fire, but none were detected. This enabled the observers to preserve, in winter, the temperature more nearly constant.

The Observatory was designed for the two magnetometers invented by Professor Gauss. The changes in the places of the instruments, occasioned by the introduction of the Lloyd vertical force, is described under the head of "Placing of the Instruments," in another part of this Preface.

MAGNETICAL INSTRUMENTS.

The *Declinometer* was of Gauss' pattern, and made by Meyerstein of Göttingen. The bar was two feet seven-eighths of an inch long, one inch and a half broad, three-eighths of an inch thick, and weighed ten pounds. The suspension thread was composed of parallel fibres of raw silk, without twist. The thread laid in the grooves of a screw working horizontally into a nut attached to the ceiling, so that when, by the lengthening of the fibres, it was necessary to wind up a portion of the thread, the same vertical position would be preserved. To note the changes of declination a small telescope was employed, whose motion in a vertical plane allowed reference to be made, from time to time, to a mark upon the ceiling. The scale was of white card paper, having the divisions (one millimetre each) lithographed upon it. The divisions admitted readily of being divided by the eye into tenths. The value of one division was found to be $27''.3$, whilst in the College building, (previous to July 20th, 1840,) to $20''.7$. For a full description of the declinometer see Taylor's Scientific Memoirs, vol. II. part I, page 30. Its place in the Observatory is marked *d* in the drawing, that of the telescope *D*. The coefficient of torsion was found to be so small that no account was taken of it in the reductions. It amounted to 17.1 divisions of the scale for 180° .

The *Bifilar or Horizontal Force Magnetometer* was of Gauss' pattern, and made by Meyerstein of Göttingen. The bar was three feet five-eighths of an inch long, one inch and seven-eighths broad, one half of an inch thick, and weighed twenty-five pounds. The suspension wires slightly inclined to each other, but as the force of torsion was calculated by Professor Lloyd's formula, this is immaterial. This instrument is fully described in Taylor's Scientific Memoirs, vol. II., part I., pp. 252 *et seq.* The value of one division of the scale, in parts of the total horizontal force, was found to be, in May, 1840, .000.035; in June, 1841, .000.038; the mean, .000.036.5, has been used as its value throughout the series of observations. Its place in the Observatory is marked *h* in the drawing, that of its telescope *H*.

The *Lloyd Balance, or Vertical Force Magnetometer* which was used until January, 1841, is fully described in the "Account of the Magnetical Observatory of Dublin, &c.," by Professor Lloyd. It was twelve inches in length, having at its ends cross wires set in copper rings. Its centre of gravity was supported by a knife edge, and equilibrium was produced by means of fine screws working in nuts on the arms of the needle. The value of one division of the scale, in parts of the total vertical force, was found to be .000.016.5, both in the College building and Observatory. The relative intensities of the three magnetometer bars was, for the horizontal force, the declinometer and the vertical force respectively, 57.40, 20.12, and 1, as determined April 17th, 1840. As the introduction of the reflecting vertical force magnetometer changed the arrangement of the instruments, the position of this is not marked on the drawing.

Reflecting Vertical Force Magnetometer.—The Lloyd vertical force instrument was replaced in January, 1841, by a reflecting one upon the same principle, made at my suggestion by Joseph Saxton, Esq. The magnetic bar, of a trapezoidal form, and cut off at the ends by two planes making a considerable angle, was supported by a knife edge passing through the axes of figure, and carrying a mirror turning with considerable friction on a cylindrical axis, at right angles to the plane of the bar. The bar was two feet one inch long, two inches wide in the middle, one and a half where it was cut off by the planes, and a quarter of an inch thick. It was of steel, hardened as perfectly as Mr. Saxton could effect. The knife edge rested upon agate planes, supported by brass columns attached to the heavy wooden base of the instrument. The base was supported by four levelling screws, and the case protecting the instrument from currents of air was lined with copper, to serve as a damper. The top of the box was a piece of plate glass, through which a thermometer, (by Francis,) reading with a vernier, could be seen. The bar could be made to rest upon y's instead of upon the agate planes. The means of changing its equilibrium were also provided by a ball moving upon a fine screw. The mirror projected beyond the side of the box, and was observed by a telescope, as in the case of the declinometer and bifilar, the scale being, however, vertical, and the mark for adjustment of the observing telescope being at the side, and on one of the elements of the cone described by the telescope when moved laterally.

The introduction of this instrument (in January, 1841) required a new comparison of the relative intensities of the bars. The force of the bifilar, declinometer, and vertical force bars was in the proportion of 7.73, 2.60, and 1. A new computation was made with these numbers by the formula before referred to, the direction of the line in which the centres of the three instruments were to be placed, determined, and the line laid off. The bifilar retained its place, the declinometer and its scale and telescope being moved to suit the new direction. A marble shelf was inserted behind the clock case (Mr. Lukens carefully examined the clock to exclude iron or steel from it, before placing it in the Observatory) for the reflecting vertical force instrument. As before, the equilibrium of the declinometer proved to be most satisfactory.

Having carefully determined the value of the scale of the Lloyd vertical force magnetometer, I considered that the value of the new scale could best be ascertained by comparison with the former. The result of this, continued at intervals, was, that two divisions of the new scale were equivalent to one of the old, or that a change of one division corresponded to a change of vertical force of .000.033 of the total vertical force. This was after the instrument had been finally adjusted. For some time after being put up, the bar lost small portions of force, and the adjusting ball and screw were used to keep it about the middle of the scale. This instrument was very convenient indeed, especially for use by the observers whom I employed, who except a few had little or no experience in observing, and to whom the use of the Lloyd, where each observation approaches in character to an experiment, (simple it is true,) presented great difficulties. The removal of the person of the observer and of lights from the vicinity of the instrument, was a most important advantage. The great disadvantage of this instrument was the very considerable effect of temperature upon it, and after a few trials to determine this effect by the inducing methods, I resorted to a plan elsewhere described in this introduc-

tion. The coincidence of the results is better than I had expected, and the mean coefficient for temperature, though large, is well determined. The probable accidental error of the mean of 49 results, is only .25 of a division.

The *Dip Circle* was made by Robinson, of London, in 1836. The circle was six inches in diameter. The needles used are Nos. 1 and 2, and the poles reversed in each set of observations. The ends of the needles are marked A and B. It was observed upon a marble pier, about twenty feet to the southeast of the Observatory.

SUBSIDIARY INSTRUMENTS.

The *y's* of the *Transit Instrument* rested upon marble piers, which were supported by a marble block four feet long and two feet wide. The floor was framed around the block, leaving a space of two inches, to prevent any jarring from affecting the instrument. The tube was of plaster. The instrument was made by Lukens, of Philadelphia. A mark for adjusting it was fixed upon the solid granite wall of the Penitentiary, at the distance of about one quarter of a mile. The position of this instrument in the Observatory is marked *A* on the drawing.

The *Astronomical Clock* was attached to a marble block two feet eight inches long, at the top six inches wide, at the bottom one foot and six inches. The floor was framed around this as around the transit block. Both blocks rested upon foundations, which extended to the distance of four feet below the ground. The pendulum of the clock was of brass, and made compensating, by carrying with it a cistern of mercury. The position of the clock is marked *B*. The clock was used directly to indicate the times of observing the declinometer. Two chronometers gave the time of observing the horizontal and vertical force magnetometers. These chronometers were compared every day with the clock.

The *Telescopes* of the three magnetometers were also set upon marble blocks disconnected with the floor.

METEOROLOGICAL INSTRUMENTS.

These consisted at first of a barometer, a dry and wet bulb thermometer, a Daniell's hygrometer, one of Saussure's for comparison, and a self registering anemometer, and rain-gauge by Osler, of Birmingham. To these were afterwards added temporarily, a barometer, by F. R. Hassler, and two radiation thermometers by Fisher, of Philadelphia. During the course of the observations a new dew point instrument of my own invention, was substituted for the Daniell's hygrometer.

The *Barometer* was a cistern barometer, made by Fortin, No. 8. The tube was about a quarter of an inch in diameter. The brass scale was divided into millimetres, and read by the vernier to five hundredths of a millimetre. It was compared with the standard barometer at Brussels, and found to stand .147 of a millimetre higher. It was compared also with the standard barometer at the Paris Observatory, and found to be 0.487 of a millimetre higher. The cistern was 112.3 feet above mean tide at the Schuylkill Water Works. The corrections for capillarity and temperature were taken from the report of the Committee of Physics of the Royal Society of London. Its place in the Observatory is marked *F* on the drawing.

In January, 1842, a barometer, of the construction of F. R. Hassler, late superintendent of the U. S. Coast Survey, was placed by the side of the Observatory barometer, their cisterns being nearly on the same level. The tube of this barometer was nine-sixteenths of an inch in diameter, and the scale was attached to a steel rod. The observations will be found in the records, the final results for comparison of the two barometers are given in the means of the meteorological observations at the close of the records. It was removed in September of the same year.

Hygrometers.—The hygrometers originally provided for the Observatory, were a Daniell's hygrometer, made by Greiner, of Berlin, a wet bulb, and for comparison, a dry bulb thermometer, (Auguste's psychrometer,) beautifully divided on porcelain to half degrees, by the same maker, and two hair hygrometers by Fortin. The difficult experiment required by Daniell's hygrometer rendered nugatory my attempts to procure regular observations with it, much less reliable ones; no one could use it but the senior assistant, and he was only present during the day, and found its use very difficult. In a dry and cold climate like ours, this instrument cannot be used to any advantage. Of the hair hygrometers, I can say little, not having discussed the observations, but the change of the hairs was obvious to even careless inspection, the point of saturation affording frequent opportunities for observation, and showing great changes in the register of the index. The scale of Saussure's hygrometer, when first put up, marked less than 90° in air containing the maximum of vapor at about 70° Fahrenheit. The wet bulb hygrometer is very convenient during the summer, and when a current of air is blowing over it, so as to produce the character of equilibrium which the theory of Apjohn supposes. When the temperature is below 32° Fahrenheit, the instrument becomes difficult of use, if the film of ice is too thin, the temperature indicated by the ice bulb is too high, and so if it is too thick, and the just mean is seized only with great care and practice. The observations of the hygrometer were at first the least satisfactory of all in the meteorological list. In April, 1843, I substituted a hygrometer of my own invention, an equilibrium hygrometer. At the time the first of the hygrometers was made, I supposed that I had been the first to apply this principle, but have since found that Professor Belli, of Milan, in his *Fisica*, vol. II, page 522, had described an instrument of the same kind. The particular construction of the instrument, found after trial of several forms of it to be most convenient, differs sufficiently from Professor Belli's to entitle me, I think, to whatever credit may be due for it; and the first idea shown by a model still existing, would relieve me from the supposition of having borrowed even the principle. Until an extract from Professor Belli's work was given in the *Annales de Chimie*, I was not aware of the existence of his instrument, though I had procured a copy of his *Fisica* for the library of the Girard College. The form of the hygrometer referred to, is one of those described in the *Proceedings of the American Philosophical Society*, vol. II, pages 249, 250, consisting of a small reservoir for water, to be artificially cooled by ice or salts, for ice and for pounded ice and salt, according to the temperature of the point of deposition. A small trough enters the box, and projects from the exterior *horizontally*. The best form and material for this were found to be afforded by a tube of brass. This was closed at the two ends, and had a slit extending along the upper part of it, whilst it projected from the box wide enough to admit the free motion of the stem of a small thermometer, the bulb of which was inserted through an opening at the further end of the tube from the box,

the thermometer itself hanging by a hook to a small wire projecting from the upper part of the reservoir and parallel to the hygrometer tube. The interior of the tube was coated with varnish, to prevent the action of mercury placed in it, and serving to make a conducting contact between the bulb of the thermometer and the metal of the tube. This tube was kept bright by rouge. To make an observation it was only necessary to fill the reservoir with a cooling mixture capable of reducing the temperature of the bar at some cross section exterior to the reservoir, to the temperature of deposition. At this section the envelope of moisture terminated, and here was usually a well defined line, opposite to which the bulb of the thermometer was brought to indicate the temperature. The bulb being very small, it was not thought necessary to apply a correction for the difference between the mean temperature of the bulb and the temperature at the middle point, though, theoretically, there is a small difference. To obtain a sufficiently low temperature, and to allow equilibrium to ensue, was the chief precaution to be taken, a rule as to time of filling the reservoir and a visit to it before observing, to see that the temperature attained was low enough, being directions easily attended to. It required but little tact in the observers, and after a very short trial, all succeeded in making these observations. There results the most extended journal of deposition dew points at regular hourly intervals, which, as far as I am aware, has ever been made. These are reduced and compared with the results by the wet bulb hygrometer, (psychrometer,) computed by Professor Apjohn's formulæ. Care was taken to exclude this hygrometer from the action of the wind, as far as practicable, for otherwise the deposit of vapor is removed as fast as formed from the parts really at the temperature of the dew point.

The special account of the reduction of the observations with the hygrometers, and the tables formed, will be reserved for a subsequent part of this introduction.

The hygrometers were placed in a small projection from the large north window of the Observatory, enclosed by three sides of a hexagonal prism, marked *Z* in the drawing, made of inclined parallel strips of thin pine, painted white, excluding the sun, but not the air. An exterior screen, made in a similar manner, served further to protect the thermometer from direct and reflected heat. The bulbs of the thermometers were about four feet above the ground. The scales of the psychrometer were enclosed in exterior glass tubes. On the east side of this screen was placed a box marked *C*, to contain the ice used with the new dew point instrument. When the sun or high winds did not interfere, the observation with it was made in the angle formed by the sides of the vestibule and Observatory, otherwise, inside the vestibule, on the stand marked *C*; of course the outer door was kept open.

Radiation.—In June, 1841, (by request of Professor James P. Espy,) two thermometers, made by Fisher, were registered, one was covered with a flock of cotton and exposed to the sky at night, the other had a bulb of black glass, and was exposed to the sun. The observations are found in the records in the columns headed "Radiation." The observations were discontinued after December, 1842.

The *Anemometer and Rain Gauge*, by Osler, of Birmingham, registered the direction and force of the wind and the quantity of rain. This instrument has been fully described by the maker. The rain gauge was on the roof of the Observatory, twenty-four feet one inch above the level of the cistern of the barometer, and thirty feet above the ground. On the 29th of

October, 1840, a series of experiments was commenced upon the springs, for the register of the force of wind. In May, 1841, slightly curved bars, or nearly flat springs, placed under the table, or registering part of the instrument, were substituted for the spiral springs of the original instrument. The original springs admitted of at least three gradations, and were situated behind the plate which received the impulse of the wind. In the new springs one only is brought into play in slight breezes, the other measured the force of stronger winds. The sensibility of the instrument was thus much increased in light breezes, or below five pounds to the square foot, while it served equally well to register those of a stronger character. The avoiding the great friction of the original instrument, the exposure of the spring to the weather and to great variation of temperature, were other advantages. Besides, the springs being in the computing room, they could be examined more readily, and changes made with more facility. The removal of considerable weight from near the top of the vane, and greater compactness, were further advantages. The new springs were of hammered brass. On May 11th, 1841, the scale of the motion of the pencil, registering the force of wind, was satisfactorily determined. The means of the observations previous to the commencement of the experiments, have been inserted in the tables of the means of the meteorological observations for 1840, but cannot be depended upon. From July, 1841, the observations are more reliable. Even then the force of light winds was imperfect.

Snow Gauge.—In November, 1841, Mr. Solon W. Hall, then first assistant in the Observatory, caused the rain gauge to register the fall of snow, by enclosing it in a case, supplied with steam of low tension by a pipe from a small boiler placed on the Observatory stove. The snow which struck upon the gauge thus moderately warmed, remained upon it, and melting, ran into the reservoir for the register of rain. The register of snow was, however, defective. The hourly fall could not generally be ascertained, and sometimes the snow was not even melted.

PLACING OF THE INSTRUMENTS.

The Observatory was designed for the two instruments invented by Professor Gauss, and arranged accordingly. These instruments, the declinometer and bifilar, were to be placed according to the problem developed by Gauss, (Taylor's Scientific Memoirs, vol. II, part I, pages 270-1-2,) and the observing telescopes were to be placed upon two piers at the north end of the building, the cross hairs of the transit instrument at the south end serving as a collimator mark for the declinometer telescope, and the declinometer bar being nearly in the axis of the building, north and south. Thus the absolute variation could be easily observed, and there was room on each side of the bar for the experiments of deflection. Just after the piers were erected, I received a description from Professor Lloyd, of his vertical force magnetometer, and did not hesitate, for the sake of observing changes in the three magnetic elements, to alter the arrangements of the Observatory, and to adapt it, as far as practicable, to the introduction of his vertical force instrument, in conjunction with the bifilar or horizontal force magnetometer, and the declinometer of Gauss. The relative intensities of the three bars were accordingly determined by experiments of deflection, with the subsidiary apparatus in the College building. The deflected bar was a Gauss declinometer bar, the distances were carefully measured, and were such

such, that no permanent change of magnetism could take place. The relative intensities of the three bars were, for the bifilar bar 57.40, declinometer bar, 20.12, the vertical force bar, 1. These experiments were made on the 17th of April, 1840. The positions of the three instruments were determined by the problem given by Professor Lloyd, in the Transactions of the Royal Irish Academy, vol. XIX, part II, in which the declinometer is placed in equilibrium by the other two instruments. I was obliged, however, by the form of the Observatory, to take the root of the equation corresponding to the less stable equilibrium. Having by computations determined the relative distances of the bars, and the angle made by the line joining their centres with the magnetic meridian, the line was drawn and the distances were carefully laid off from a standard scale, and the supports arranged accordingly. The approximate distance between the bifilar and declinometer bars was given by the form and dimensions of the Observatory, and also the position of the bifilar; it being desirable that a mark for the observing telescope of the latter should be found on the north side of the western projection of the building, and that the declinometer should not interfere with the entrance to the computing room, where the anemometer was placed. The vertical force instrument was placed upon a wooden stand.

ADJUSTMENTS.

Declination Magnetometer.—The three instruments being in position, the declinometer was carefully and repeatedly observed. Then the horizontal and vertical force bars were removed, and the declinometer found to remain in equilibrium, within the limits of change of the declination during the observations, which were frequently repeated. During the course of the experiments for determining the value of the scale of the bifilar, and those for trying the equilibrium of the declinometer, I perceived that after the removal of the bar of the bifilar, and its restoration to its place, the instrument did not read upon the same division of the scale. I tried various experiments to determine the cause and to obtain the control of this, but could not succeed in either object.

On first commencing the observations, it was plain that routine observations could be secured, for being simple in their character, it is easy to train up observers. For the work requiring the presence of the head of an Observatory, I could not provide. An intelligent assistant had enough to do to keep regularity among the young observers, to examine their work, to observe at hours when the services of others could not be had, to see that the reductions were made, the books in order, the time correct, and many other miscellaneous duties of an onerous and engrossing kind. Then too, I had not means to keep even one such an assistant permanently. The changes were frequent as the list given in another part of this introduction shows. My own duties in the city, rendered frequent or long visits, except at night, impracticable. I had supposed when the Observatory was erected, that I should be a resident on the premises, but not only this did not occur, but my official connection with the Girard College did not continue, and I assumed other and engrossing duties. The change of position of the instruments, which threw the declinometer from the middle of the breadth of the building to the western side, and close to the wall, rendered deflection experiments difficult, if not impossible; the line perpendicular to the direction of the bar on the western side, passing into a massive stone pier containing a flue from the grate (of copper) in the comput-

ing room. All these circumstances taken together, induced me to confine the observations professedly to *differential* results, and to concentrate the whole attention of the observers upon them, leaving the instruments as far as practicable undisturbed by the removal of bars.

Bifilar Magnetometer.—The great length of the wires of this instrument gave very considerable sensibility to it, a single division on the scale expressed only 0.000.036.5 of the total force, with a convenient distance between the wires, as determined by the lower screw to which they were attached, and with the requisite strength to bear the heavy twenty-five pound bar. At first the mistake was made of obtaining too weak a wire, one which being uniformly strong, would have borne this weight, but which gave way at weak points. In experimenting upon the different methods of adjusting, I found that given by Professor Lloyd, in his "Account of the Magnetical Observatory of Dublin, &c." the best adapted to the circumstances under which I was working, although I also used the more elaborate method of Gauss with tolerably satisfactory results. Having no subsidiary bifilar magnetometer, and the vibrations of the subsidiary declinometer, at the College building, proving an altogether insufficient check upon this much more delicate instrument, the most rapid method of adjustment was the best. The measure of force is obtained by the angle through which the suspension must be twisted to place the bar at right angles to the magnetic meridian, (*Z* in the notation adopted.) This value was found, in May, 1840, to be $71^{\circ} 43'$. The wires attached to the rafters of the trussed roof of the building it was feared, on first setting up the instrument, would, in high winds, transmit a vibratory motion in a vertical direction, interfering with the distinctness of reading. This, however, never occurred, even in the highest winds, to the extent supposed, and in general was imperceptible. The effect of the small vertical force bars upon the bifilar was quite insensible, and that of the declinometer affected the value of the scale very slightly. These were determined by experiment in June, 1840, when the total effect of the other instruments was determined to be to change the value of the scale division in the proportion of 1 to .995.622. After the bifilar was set up, a motion commenced in the direction of decrease of force, and was progressive, though not steadily so; at last an extra scale was required on occasions of auroral disturbances, and finally the ordinary readings were upon this extra scale. I availed myself of the opportunity afforded by the change of the vertical force instrument, in January, 1841, to examine the magnetism of the bar, and found a sensible decrease, its force amounting to .9601 of its force in May, 1840. These experiments were made by deflections of the subsidiary declinometer, the only means in my power. The change of force shown upon the scale from June, 1840, to January, 1841, using the monthly means, was .0165, by these experiments, .0399. A further experiment of the loss of force was made in June, 1841, when the instrument was accidentally disturbed by one of the observers. The loss of force then found by determining the value of *Z*, was .0314 of its force in January, 1841. The change of force shown upon the scale from January to June, 1841, using the means of the month, was .0026. The decrease of horizontal force, from July, 1840, to June, 1841, as deduced from observations of the dip, was .0050, considering the vertical force to have remained constant.

To ascertain the law of change of force of the different instruments, vibrations were made without the dampers, at stated times. They led, however, to no satisfactory result, as may be seen by consulting the table in the observations, p. 821. The value found for each division of the scale, in

terms of the horizontal force, in June, 1841, was .000.038, or scarcely altered from its former value. The mean value is .000.036.5. The bar now moved very slowly in the same direction, indicating a loss of force, requiring experiments not in my power to make, to determine positively whether this is all due to the decrease of force of the magnetic bar. I prefer, for the present at least, to consider the appropriate uses of the results as being differential. If time should serve hereafter to return to the discussion, I might perhaps be able to clear up this doubt. As to the cause of this loss of force, experiments at different times indicated that it was rather from changes of temperature than from oxidation. Full data are in the records to determine whether successive increases of temperature do or do not permanently affect the force of the magnet, and whether after the temperature has once reached a certain point, any increase to a lower point continues to discharge a part of the magnetism or not. I cannot now, however, enter into this discussion. The corrections for temperature were obtained by more elaborate, and probably more unexceptionable methods than those which I have yet seen recorded in other observations, notwithstanding which I was engaged in experiments to substitute compensating bars according to Dr. Lamont's suggestions, when obliged, from entering another career, to leave these interesting pursuits.

Vertical Force Magnetometer.—The adjustment of the Lloyd balance magnetometer, was made, so as to give a sensibility which would not carry it off the scale during strong auroral disturbances, of which one occurred just after it was set up, and which in ordinary conditions of the force, brought the bar about the middle of the scale. The ordinary adjustments of the point of support and cross hairs used in reading, by equality in length of arms and the like, were duly attended to, as laid down by Professor Lloyd in his very clear instructions for the use of the instrument. The value of the scale in terms of the vertical force was determined, according to his suggestion, by comparing the oscillations of the needle suspended so as to vibrate horizontally, and vibrating without its dampers in the vertical plane of the meridian, and was verified by changing the position of the centre of gravity, so as to bring it in the axis of suspension, and vibrating in two planes at right angles. This instrument exhibited, instead of a decrease of force, a slight increase from June, 1840, to January, 1841, as shown by a diminished time of vibration when on its agate supports, a proof that the knife edge had undergone no injury. The value of each division of the scale (the *K* of the magnetic instructions of Professor Lloyd) was .000.033. I have said nothing here, or in speaking of the bifilar, of the determinations of the angular value of the scale, which of course was carefully attended to by the different modes applicable to the two instruments. The same horizontal plane contains the magnetic axes of the three instruments. The great proximity of this instrument to the declinometer, which was required in order to produce equilibrium with the bifilar bar, rendered it liable to a change, which, as soon as observed, and the cause ascertained, was carefully watched. This was produced by the slipping of the fibres of the declinometer suspension, which caused the elongation of the thread, and thus placed the axis of the declinometer bar in a plane lower than that of the vertical force bar. The correction for temperature of this bar was very small, and the mean value of the coefficient was determined in the usual way, by vibrating in a horizontal plane at different temperatures. From this cause, if from no other, I would prefer much the use of small bars; it may be possible so to temper large masses of steel as to make the coefficient of temperature small, but in those which I have had

occasion to use, this has not been effected. Strongly impressed with the necessity for using large instruments to indicate with sufficient minuteness the magnetic changes, after having seen the large instruments of Gauss, at Göttingen, I had, after trial, completely changed my views, and was about substituting a set of portable instruments, (actually constructed,) for the large ones in the Girard College Observatory, when compelled to leave the Observatory to its ordinary routine. This change of views resulted in part from the large corrections for temperature, in part from finding that, when the Lloyd vertical force observations were reduced, they indicated more certain results, notwithstanding the difficulties and uncertainties found by my younger observers, in their rough measures, but most of all, from seeing that, in extraordinary disturbances, many of the changes were so rapid as to escape detection by the large bars, from the comparatively long time required for a single vibration.

The details of all these observations for adjustments and placing of the instruments, are fully recorded in the note books of the Observatory, but even if I could find time to present them, it might be considered unnecessary so to do; as it is, such matters of detail must be omitted. The methods used are so fully laid down in the papers referred to, and in the instructions for the observations prepared under the direction of the British Association for the Advancement of Science, that even an unpractised experimenter could not be at a loss for any one step in the arrangement of the instruments.

ON THE CORRECTION FOR TEMPERATURE OF THE HORIZONTAL FORCE INSTRUMENT.

The first observations for the correction for temperature of the horizontal force bar were made on the 16th of July, 1840, the bar having been mounted in the Observatory. A common pine box, copper fastened, was substituted for the box usually enclosing the needle; this was covered with the usual top of glass, in a frame of wood. A second box enclosed the first, leaving a space of about six inches, in which pounded ice was placed.

The position of the horizontal force magnetometer was noted at the ordinary temperature, corresponding oscillations of a bar suspended horizontally in a different building being made to furnish elements for the change of the horizontal magnetic force during the experiments. When the mean position of the magnetometer bar, and the corresponding time of oscillation of the bar of comparison, were supposed to be ascertained, ice was placed in the cavity between the boxes before described, the layers being covered with salt, to hasten the melting. The position of the instrument was noted on the usual scale, and the height of the thermometer enclosed in the box with the magnetometer bar, the bulb being as near the centre and as close to the bar as was safe.

When the temperature had remained at the lowest point for a considerable time, the ice was removed, and the bar was allowed to resume the temperature of the room.

Comparative observations were made by the oscillations of the suspended bar before referred to, during the course of the experiments. The bar was one of the Gauss', mounted for a declination magnetometer, with its mirror and case, but the quieting rectangles of which were removed. With all the advantage of minute accuracy in noting the oscillations, the correction thus afforded was absolutely valueless from its comparatively rude indications, a fact

which was abundantly proved in other repeated attempts to employ it, so numerous that accident cannot be charged with the conclusion.

Tracing a curve to represent the observations of the horizontal force magnetometer, its ordinates decrease regularly with the decrease of temperature, until a certain point where the curve rises, though the temperature, as shown by the thermometer, continues to fall. The apparent changes of the horizontal magnetic force, as shown by vibrations, giving no effective correction, it is of course safest to use the observations at the extremes of temperature, or rather at the highest temperature, and at that where the curve begins to rise, the temperature still falling; these observations were as follows:

First observation,	833.3,	readings of scale of declinometer,	83.5° Fahr., temp.
Second "	845.3		80.0
Mean	839.3		81.7
Last observation before change	712.7		38.

Difference . . . 126.6 on scale. 43.7° Fahr.
giving a correction of 2.9 divisions of the scale for one degree of Fahrenheit.

If the observation next before the change in the direction of the curve be taken, the result will be as follows:

Mean of first and second ob- servations, as before . . .	839.3,	scale of magnetometer, at 81 7° Fahr.
Observations next before change of curve	720.7	39.4

Difference 118.6, division of scale 42.3 Fahr.
making the correction for one degree of Fahrenheit 2.8 divisions of the scale.

Assuming the temperature to decrease regularly with the times, or the curve to be a straight line, which it is nearly until towards the minimum, the same correction would appear to be 3.1 divisions of the scale. The mean of these three determinations for this instrument is 2.93 divisions for 1° Fahrenheit. The time of the experiment was 2h. 44m. The time taken to reattain the temperature of the Observatory was so considerable as to induce the rejection of the results without special examination.

I had intended to try the method of deflection next, but the very small amount of change in deflection resulting from experiments made, when bars of the magnitude of this one are placed at the requisite distance to secure their not being permanently affected by each other, turned me aside from that method, after trying it upon the large vertical force bar, and I again resorted to a method similar to the one first stated, except that the apparatus was heated above the ordinary temperature by spirit lamps in the space before occupied by the ice.

For comparison of the horizontal force, I used one of Weber's portable declinometers, substituting for the suspension fibre, a silver wire, so as to form a unifilar force magnetometer. I was disappointed in its action, however, the position changing permanently; and after many trials to obviate the irregularity, was obliged for the time being, to give up this idea, and to resort again

to comparisons by vibrations. The result of this experiment was even more unsatisfactory than that of the others, the whole occupied five hours and a half, the attempted corrections by vibrating a declinometer bar had no significance, and the differences between the first observations and those about the highest temperature, and of those about the highest temperature and the last observations were very considerable. The mean correction deduced, was three divisions for 1° Fahrenheit. The differences of the extremes of temperature was $54^{\circ}.3$, and the highest temperature, nearly 100° , was maintained for about one hour. Though the bar did not at once resume its usual position in the scale, indicating some loss of magnetism, this did not appear to be the case from the observations of the following day. These observations were made on the 22d of February, 1841, or seven months after the former ones.

At the beginning of 1842, a continuous series of observations was made, by allowing the Observatory to attain the winter temperature on one day of the week, and obtaining thus by comparison with the preceding and succeeding days, when the room was artificially warmed, the correction. The declinometer bar was vibrated in a building, the temperature of which remained nearly constant, but as before no useful result was obtained. The comparison of observations on twelve days gave the following results :

				DIFFERENCE.	
				Temperature.	Scale.
January	15, 16, 17,	.	.	24.5	31.3
	22, 23, 24,	.	.	29.2	68.4
February	19, 20, 21,	.	.	22.3	19.
	26, 27, 28,	.	.	7.5	10.5
Sum .				83.5	129.2

or 1.55 divisions of the scale for 1° Fahrenheit.

The unsatisfactory nature of these results determined me first, to bestow all the time I could personally spare to obtaining an efficient set of subsidiary instruments ; and second, when they were obtained, to have daily observations made by comparison with the Observatory instruments.

This was finally accomplished about the close of 1842, when there were mounted in one of the College buildings, a small declinometer, a small bifilar, and an inclinometer on Prof. Lloyd's plan. The bifilar was a bar about nine inches long, suspended by fine silver wires, and was observed by reflection. This being in effective condition, it would seem that there was nothing wanting to determine the correction for temperature, but patient observation. A set of comparative observations, six in the set, were made each day, in the morning and afternoon. The comparison of them proves most conclusively that, if they be admitted as of any value, there is an unascertained influence in regard to temperature, not embraced by our ordinary considerations in reference to the matter. The results are too fluctuating and discrepant to be explained by errors of observation, or by inequality of temperature of the needle and thermometer. I have discussed the observations of two years, 1843 and 1844, first in reference to obtaining the relative values of the scales of the two instruments, and second to the correction for temperature. To obtain the relative value of the scales of the instruments, observations were compared, in which the difference of temperature was small, so as to admit of the application of an approximate correction, the differences of

intensity considerable, and which were taken within a few days of each other, so that the gradual change of intensity in the magnets should not affect the results. The results will be found in the annexed table, which gives the dates of the observations, the number in the course of the month which were found suitable for the comparison, the sum of the divisions of each of the scales compared, and the ratio of the two scales. Very anomalous observations were rejected. There is no ratio which will satisfy more than approximately all the observations, but as the comparison thus sought is to be used in cases where there is but a small difference in the intensity readings, it is quite sufficient for the purpose.

TABLE

Showing the ratio of the scales of the horizontal force magnetometer of the Observatory, and of the subsidiary horizontal force instrument.

Date.	No. of Comparisons.	Sum of all the differences in the observations compared.		Ratio of scales.	Mean ratio for the periods marked.
		Observ'y Mag'r.	Subsid'y Mag'r.		
1843.					
February ..	2	47.0	19.7	2.4	2.6
April.....	6	130.5	55.5	2.3	
May	4	85.3	34.3	2.5	
June.....	8	180.4	58.2	3.1	
July	9	238.3	95.5	2.5	
August	9	294.3	100.4	2.9	
September	10	201.5	74.5	2.7	
October....	5	126.7	45.1	2.8	
November.	7	90.8	45.5	2.0	
December.	4	82.3	30.6	2.7	
1844.					
January ...	5	73.2	34.1	2.1	2.1
February ..	7	112.	55.3	2.0	
April	6	193.8	101.	1.9	
May.....	16	453.1	207.7	2.2	
June	5	168.1	78.5	2.3	
July	8	145.7	98.6	1.6	
August	6	136.5	92.7	1.5	
September	6	116.8	66.1	1.8	
October....	10	168.9	92.6	1.8	
November	13	322.2	18.8	1.5	
December.	11	210.5	114.8	1.8	1.7

Next the observations of the Observatory magnetometer, near to each other in date, having nearly the same intensity as shown by the subsidiary force instrument, and in which the temperatures differed considerably, were classed together and compared, reducing for the small differences in intensity shown by the subsidiary instrument. The correction for temperature of the subsidiary instrument was neglected, as the changes of the temperature in the building where it was placed were small, and those of the instrument caused by

them, were found on examination of the results, to be less than the error of observation.

If any value be attributed to the subsidiary observations, numerous as they are, made by several assistants (generally the principal assistant for the time) in turn, and with a watchful care over the instruments, it is certain that they indicate elements in the correction for temperature, different from those generally supposed to enter into it. No reasonable suppositions in regard to differences of temperature between the thermometer and the magnetic bar, or to changes in the coefficients varying with the temperature, will explain all the cases presented by these observations. The classification of the results will give no doubt approximate coefficients, which at a mean may apply as corrections. The method is not liable to the objections occurring to the usual mode of obtaining this correction, and the large body of results brought to bear upon it, would entitle the coefficients to confidence, were it not for the palpable irregularities presented in the course of its application. Not to go into this discussion further at present, I subjoin a table of results for 1843 and 1844, in the different columns of which are shown the dates of the observations, the number selected for comparison, the sums of the observed differences of reading on the scales, corrected for the changes shown by the subsidiary instrument, the sum of the differences of temperature observed, and the correction for temperature thus deduced in divisions of the scale.

TABLE

Showing the correction for temperature of the horizontal force magnetometer

Date.	No. of Comp's.	Sum of the differences.		Ratio or cor- rection for temp'e.	Mean for six months.	Mean for the year.
		Magnet'r.	Thermom'r.			
1843.						
Feb., Mar.	5	208.9	121.3	1.7	2.50	Mean for 1843, 2.39.
April.....	6	120.7	47.4	2.5		
May.....	13	243.4	95.1	2.6		
June.....	11	288.9	90.4	3.2		
July.....	10	188.	73.7	2.6		
August.....	8	146.	51.3	2.8	2.28	
September	12	281.3	118.2	2.4		
October....	8	154.4	70.9	2.2		
November	8	146.8	72.9	2.0		
December.	13	203.7	119.5	1.7		
1844.						
January....	11	183.4	112.	1.6	1.94	Mean for 1844, 1.97.
February...	11	163.	91.6	1.8		
April.....	8	137.4	67.7	2.0		
May.....	6	132.4	63.8	2.1		
June.....	11	255.8	118.2	2.2		
July.....	12	184.5	106.9	1.7	2.00	
August.....	10	113.4	67.1	1.7		
September	8	95.	74.8	1.3		
October....	16	235.9	93.9	2.5		
November.	10	236.1	92.2	2.6		
December.	8	93.8	41.6	2.2		

I also tried another method of discussing these observations, which, however, was not as unexceptionable as the one just given. It consisted in taking the results corresponding to the highest temperatures during each winter, and comparing them with those corresponding to the lowest temperatures, a correction being made to reduce the position of the subsidiary magnetometer corresponding to the first mean to that corresponding to the second. These comparisons were liable to be affected by the unequal distribution of the results used over the different parts of the month, for the magnetometer bar was losing its force so as to make the indications of the scale different at the same terrestrial intensity, at intervals separated by a considerable time from each other. The conclusions derived from this mode of discussion do not, however, differ very materially from those already given, upon the plan which is preferred, as the following table will show.

TABLE.

Date.	No. of observations	Range of temperature.	Observatory Magnetometer.		North House Magnetometer.		Sum of the differences.		Ratio or corr. for temperature.	Mean ratio for 1844.
			Scale.	Temp.	Scale.	Temp.	Scale.	Temp.		
1844.										
Jan. 1—27	6	46.2—35.8	966.	40.3	49.4	31.7	26.6	20.4	1.30	2.03
3—24	6	62.8—59.3	993.4	60.7	49.8	38.5				
Feb. 1—19	7	47.6—38.2	995.6	43.4	62.	31.4	27.8	17.5	1.59	
2—29	6	65.2—56.1	1025.5	60.9	63.	36.1				
Apr. 1—20	5	54.9—51.2	1046.9	53.2	84.7	55.6	48.9	19.4	2.52	2.03
4—24	5	75.6—69.1	1079.4	72.6	76.9	55.6				
13—26	5	76.8—68.3	1073.6	71.3	83.7	65.	28.8	18.1	1.59	
May 1—23	6	63.5—58.8	1061.3	61.5	93.5	65.6	31.8	15.2	2.09	
3—28	6	78.6—74.7	1079.2	76.7	86.9	70.2				2.16
June 3—27	5	87.5—74.3	1098.8	80.2	88.9	76.5	48.1	18.5	2.60	
1—28	5	86.7—75.3	1108.1	82.	91.8	78.				
5—15	5	62.9—60.7	1065.	61.7	95.7	69.6	51.3	20.3	2.53	
July 5—27	5	70.9—65.9	1111.5	68.6	100.7	76.6	31.9	17.4	1.83	2.29
10—24	5	86.4—85.2	1135.8	86.	96.2	82.3				
Aug. 6—22	5	72. —68.1	1143.8	70.4	106.7	77.2	27.5	12.6	2.18	
1—21	5	86.3—76.5	1146.8	83.	92.3	79.4				
Sept. 6—28	5	65.6—58.	1122.7	61.1	116.3	68.1	2.17	21.17		2.29
10—21	5	84.6—80.9	1115.6	82.2	110.9	75.8				
Oct. 12—31	5	65.6—57.	1112.4	60.7	110.8	52.6				
2—18	5	79.2—75.2	1142.	76.9	105.2	59.5	39.1	16.2	2.41	
Nov. 1—25	5	58.1—48.	1110.3	53.3	124.3	45.6				2.54
4—23	5	71.2—68.9	1162.5	70.	131.9	53.7	42.5	16.7	2.54	
Dec. 9—30	5	56.1—49.6	1182.7	53.1	114.4	40.				
6—27	5	66.3—62.	1191.3	63.8	103.	43.9	26.4	10.7	2.47	

The tables of which these are abstracts, are not given, because of the amount of detail to which it would lead. Questions in regard to the extent of the variations of temperature, or of scale reading contained in them, will be answered by referring to the tables of the regular observations for the months and years indicated in the column of dates.

The following is a general summary of the attempts to determine the correction for temperature :

II	July 16, 1840.....	3.1	Mean of seven observations made by cooling the magnetometer bar, and observing the readings of the instrument. Defective on account of imperfect correction afforded by vibrations of a separate declinometer bar. Difference of temperature $42^{\circ}3$.
III	February 22, 1841.....	3.0	Mean of highest and lowest temperatures observed in heating the magnetometer bar and observing the scale. Defective as before. Difference of temperature $54^{\circ}3$.
IV	January 15—22, 1842... 16—23, 1842... 17—24, 1842... February 19—26, 1842... 20—27, 1842... 21—28, 1842...	1.5	Mean of eight results by comparing position of declinometer in a day when the Observatory was allowed to cool, with the position at the same hour the preceding and succeeding days with different temperatures. Defective from failure of subsidiary horizontal force apparatus, and vibrations of declinometer. Difference of temperature $10^{\circ}4$ for each result.
I	February to June 1843...	2.5	Mean of thirty-five results by comparisons with subsidiary instruments, made twice each day. Difference of temperature $10^{\circ}1$ for each result.
	July to December, 1843...	2.28	Mean of fifty-nine results on the same plan. Difference of temperature $8^{\circ}6$ for each result.
	January to June, 1844...	1.94	Mean of forty-seven results on the same plan. Difference of temperature $9^{\circ}6$ for each result.
	July to December, 1844...	2.00	Mean of sixty-four results on the same plan. Difference of temperature $7^{\circ}4$ for each result.

These results occupy the rank of the numbers placed before them in reference to the order of weight. It is, I think, a fair inference from them, that the correction for temperature has diminished, and that in the different years it might be taken as follows:

1844, 2.0	Experiment gives	1.97 of greatest authority.
1843, 2.3	"	" 2.39 "
1842, 2.6	"	" 1.5 of least authority.
1841, 2.9	"	" 2.9 probably of medium authority.
1840, 3.2	"	" 3.1 of medium authority.

The mean of these is 2.6. A correction of 2.5 was used in the original reduction of the observations while making, but I have preferred to substitute the coefficient, as just stated, in the different years, in the reductions now given. It would not be difficult to assign a physical reason why the coefficient should thus change, but I give it now as the general conclusion from the observations. If no weight whatever be attributed to any observations but those of 1843 and 1844, which will probably be found as numerous and unexceptionable as have been devised for obtaining this correction, the results of 1840 and 1841 will be the chief ones affected by the uncertain correction. These are the least valuable on all accounts, the first being a broken year, and the second, one in which the observations were less developed than in the succeeding years. I see no special reason, however, for believing that the correction for temperature does not approximate to the truth, even in 1840 and 1841, as far as the assumption is admissible, that the changes in the magnetism of the bar and the changes of temperature are proportioned, and that the bar resumes the same permanent magnetic condition in resuming the same temperature.

ON THE CORRECTION FOR TEMPERATURE OF THE VERTICAL FORCE INSTRUMENT.

The correction for temperature of the Lloyd vertical force instrument was ascertained by the usual method, of vibrating the small bar when suspended horizontally, and when alternately heated and cooled artificially. A suitable box was prepared for the purpose, having plate glass ends, the means of observing the arc of vibration, of properly suspending the needle, of heating and cooling the needle. The passage of the cross hairs in the needle over a meridian line traced on the bottom of the box, was noted with a chronometer. A thermometer was placed with its bulb near the axis of the needle. The arc of vibration, at the beginning of the observations, was 5° , and that at the end 1° , between which limits the bar made upwards of two hundred and fifty vibrations. The position of the horizontal force magnetometer of the Observatory was noted during the experiments. The experiments were made in a building on the College premises, but not near the Observatory. It is not necessary to enter into further particulars relating to the mode of observing, in which the ordinary course of this kind of observation was pursued. The results are given in the following table:

TABLE

Of experiments to determine the correction for temperature of the Lloyd vertical force magnetometer.

Date.	Time of ten oscillations.	Temperature.	Hor. force mag'r. in Obs.	Temperature.
	Seconds.	Fahr $^{\circ}$.	Scale.	Fahr $^{\circ}$.
1841.				
February 9	87.950	37.2	1128.8	35.6
"	87.900	41.0	1079.3	36.5
"	88.117	94.6	1139.5	36.1

Reducing the first and second observations to the horizontal intensity of the the third, making due allowance for the difference of temperature of the horizontal force magnetometer in the different cases, the resulting number is 87.990 for the time of vibration at $39^{\circ}.1$, and which is to be compared with 88.117 at $94^{\circ}.6$, by the formula, $q = \frac{2}{t'-t} \frac{t'^2 - t^2}{t'^2 + t^2}$, in which q is the correction for 1° Fahrenheit, sought, t' and t are the temperatures; and t' and t the corresponding times of vibration. Substituting the numbers in this formula the correction is found for 1° Fahrenheit, $q = .000,051,822$ which is equivalent to 3.1 divisions on the head of the micrometer screw attached to the instrument.

The reflecting vertical force instrument was substituted for the other in January, 1841. Before putting it in its place, observations were made for its correction for temperature by the deflections of a declinometer, but as already mentioned, the distance at which the bar was necessarily placed from the declinometer, to prevent any permanent change of magnetism, rendered the difference of deflections at different temperatures, too small to make the re-

sult satisfactory. The weight of the mirror, and of the parts uniting it to the axis, was too great to render the method of horizontal oscillations satisfactory without removing these fixtures, hence the next mode resorted to for obtaining the correction for temperature, was to compare the indications of a subsidiary instrument kept in a building where the temperature changed very slowly, with those of the Observatory instrument, at different temperatures, the differences of temperature being rendered considerable on consecutive days. The subsidiary instrument was a small dipping needle mounted on a knife edge, which could be turned. It was rendered horizontal by weighting, and the knife edge was then turned into its proper position. The needle was placed in a case to defend it from currents of air. The indications of this instrument proved very unsatisfactory, its position changing permanently. It was observed at intervals of about a week apart for two months. There were four cases in which but little change was shown by the subsidiary instrument on successive days, where the differences of temperature were considerable. These gave fourteen divisions nearly, for the correction for one degree, of the magnetometer scale.

Subsequently an inclinometer, according to Professor Lloyd's plan, was mounted as a subsidiary instrument, and observed twice each day, with the vertical force instrument of the Observatory. These observations were commenced in January, 1843, and were continued till the closing of the Observatory with considerable regularity. To obtain the correction from them, a plan similar to that for obtaining the correction for the horizontal force magnetometer was pursued. The results will be found in the following table.

TABLE

Showing the correction for temperature of the vertical force magnetometer.

Date.	Corr. for 1° Fahr.	Means.	Successive Means.
1843.			
February	13.1 11.9		
March	14.8 13.3	13.3	13.3
April	12.3 13.9 17.5 13.5		
June	14.5	14.3	13.8
July	15.5 13.2 10.3 19.4 13.4		
August	11.3 10.8	14.4	14.0
September	11.6 10.9 10.4 14. 15.6		
October	13.9 13.7 9.9	12.3	13.6

Date.	Corr. for 1° Fahr.	Means.	Success'e means.
1843.			
October.....	12.9 13.4 9.9 13.5	12.2	13.3
November	15.2 10.4 14.9 12.3 11.7 11.9 13.2 14.3 13.2		
December.....	14.1 16.3 17.3 9.8 13. 22.8 13.6 18.8 13.3 16.6 17.4 11.	13.1	13.3
		15.4	13.6
Indisc. mean.....	13.56		
Probable error of mean..... .248 Probable error of single result.... 1.720			

MODES OF OBSERVATION.

The term day observations were made at the times directed by the Committee of Physics of the Royal Society, in their report and supplement. The ordinary magnetic observations were made as nearly at the times directed by the Committee as the vibrations of the magnetometer bars would admit. The times of vibrations were so great as to prevent entire conformity with their instructions, in reference to the order of observing the instruments, without the observation of one instrument interfering with that of another. Each observation entered in the abstracts is the mean of three readings at the times $T-t$, T , and $T+t$, where T represents the epoch at which the position of the magnet is required, and t its time of vibration. In adding the three readings together to take the mean, the middle one is doubled and the sum divided by four.

TIMES OF OBSERVATION.

The ordinary magnetic observations, previous to October, 1843, were made every two hours, subsequently every hour. In 1840 and 1841, the times of observation were, for vertical force, two minutes and a half before, declination at the even Göttingen hours, and horizontal force two minutes and a half after. In 1842 the time of observation of the vertical force was two minutes before, and of horizontal force two minutes after the even Göttingen hours,

the declination remaining the same as before. In the first three months of 1843 only one observation was made each day. The hour was 20 h. Göttingen time, the three instruments being observed as in 1840 and 1841. In April, 1843, a change was made in the time of observing the vertical force; it was taken at four minutes after the Göttingen hours; the times of the declination and horizontal force were the same as in 1842. No further change was made in these observations up to the time of closing the Observatory.

The observations on magnetic term days, previous to January, 1842, were made as follows: declination at intervals of five minutes, commencing at the even Göttingen hours, horizontal and vertical force at intervals of ten minutes, commencing respectively at two and half and at seven and a half minutes after the even hours. In 1842 and subsequently, the three instruments were observed at intervals of six minutes, respectively, at the even hours, at two and at four minutes after.

In 1842 a series of observations was commenced to determine more closely than had previously been done, the times of maxima and minima of the three instruments. The periods selected for these observations were obtained from the curves of the preceding eighteen months. These periods were for the maxima of the declination from 6h. 00m. to 7h. 54m., and from 18h. 00m. to 18h. 54m., for minima from 2h. 00m. to 3h. 54m., and from 13h. 00m. to 13h. 54m. For the maxima of the horizontal force from 11h. 32m. to 12h. 26m., and from 21h. 02m. to 22h. 56m., and for minima from 1h. 02m. to 2h. 56m., and from 15h. 32m. to 17h. 26m. For the maximum of the vertical force from 22h. 04m. to 23h. 58m., and for the minimum from 12h. 34m. to 14h. 28m. The periods selected for the vertical force are those which include the maximum and minimum in 1840. The period 22h. 04m. to 23h. 58m. was that of the minimum in 1840. The period 12h. 34m. to 14h. 28m. was that of the maximum. In 1842, when the observations for these phenomena were commenced, it was found that the period containing the maximum in 1840, indicated less force than that containing the minimum, and *vice versa*; and to this cause may be assigned the names given to the observations. The results of these observations, as shown upon plate *M*, do not give these phenomena.

The number of assistants at the Observatory was not sufficient to make observations regularly on occasions of unusual readings of the magnetometers, until 1843. In 1842 a few will be found collected together. In 1840 and 1841 descriptions of several will be found, which occurred on the magnetic term days. See pages 51, 57, 263 and 266. In 1843 the force at the Observatory was increased, and directions given to observe, on all occasions of unusual readings, at term day intervals. Where the circumstances appeared to make it advisable, the observations were made at each vibration of the magnets. When practicable observations were made at the same time with the subsidiary instruments in the College building, for changes of declination and horizontal force. The horizontal force instrument was a small bifilar, with a needle nine and three-quarter inches in length, and its time of vibration about ten seconds. Extremes of arcs of vibration were noted for the position of the magnet. The inclinometer in the College building was made by placing a cylinder of soft iron near a Gauss declinometer. The value of the scale of the subsidiary horizontal force, in terms of that of the Observatory was, from February to December, 1843, 2.6. The value of the scale of the inclinometer was not determined. After 1843 these observations

in the College building were discontinued for want of sufficient force to attend to them.

The times of the observations taken in connection with Lieutenant Lefroy, R. A., and the Toronto Observatory, were those requested by Lieutenant Lefroy for his magnetic tour in the North American possessions of Great Britain.

The time of observing the magnetic dip was once a week, at about 10h. A. M., Observatory time.

The ordinary meteorological observations were made bi-hourly in 1840 and 1841; after 1841, hourly. Previous to March, 1841, the time was just after the ordinary magnetic observations, or about six minutes after the even Göttingen hours, and twenty-five after the even Observatory hours. During the remainder of 1841 they were taken at four minutes before the Göttingen hours and fifteen minutes after the Observatory hours. After 1841 the even Observatory hours, or nineteen minutes before the even Göttingen hours, was the time of observation. The Daniell's hygrometer was observed until 1843 at 3h. and 9h. A. M., and at 3h. and 9h. P. M., Observatory time.

On the magnetic and meteorological term days the meteorological observations were made hourly at the even Göttingen hours, for the sake of convenience.

In order to compare the times at which the observations were made at the Observatory, with those recommended by the Committee of Physics and Meteorology, the following tables have been made out :

ORDINARY MAGNETIC.

	Times recommended by Committee of Physics and Meteorology.		Göttingen times at which the observations were made at the Observatory.			
	June, 1840 to Decem- ber, 1841.	After 1841.	June, 1840 to Decem- ber, 1841.	1842.	Jan. to March, 1843.	April, 1843 to June, 1845.
Magnetometer.	Hourly at the even Göttingen hours 0. 2. 4 &c.		Bi-Hourly.	Bi-Hourly.	Once a day at 20h. 00m.	Bi-Hourly till Oct. 1843. Hourly af- ter Sept. 1843.
Vertical Force.....	2m. 30a. before hour.	4m. after hour.	2m. 30a. before hour.	2m. before hour.	2m. 30a. before hour.	4m. after hour.
Declination.....	At the hour.	At the hour.	At the hour.	At the hour.	At the hour.	At the hour.
Horizontal Force..	2m. 30a. after hour.	2m. after hour.	2m. 30a. after hour.	2m. after hour.	2m. 30a. after hour.	2m. after hour.

PREFACE.

TRIPLES.

Magnetometer.	Times recommended by Committee of Physics and Meteorology.		Göttingen times at which the observations were made at the Observatory.		
	June, 1840 to December, 1841.	After 1841.	June, 1840 to December, 1841.	1842.	April, 1843 to June, 1845.
Vertical Force.....	13h. 50m.	—	13h. 50m.	13h. 52m.	—
Declination.....	52½	13h. 54m.	52½	54	13h. 54m.
Horizontal Force..	55	56	55	56	56
Vertical Force.....	57½	58	57½	58	58
Declination.....	14h. 00m.	14h. 00m.	14h. 00m.	14h. 00m.	14h. 00m.
Horizontal Force..	02½	02	02½	02	02
Vertical Force.....	05	04	05	04	04
Declination.....	07½	06	07½	06	06
Horizontal Force..	10	08	10	08	08
Vertical Force.....	—	10	—	—	10

TERM DAY MAGNETIC.

Magnetometer.	Times at Göttingen recommended by Committee of Physics and Meteorology and used at the Observatory.	
	June 1840 to Dec. 1841.	After 1841.
Declination	22h. 00m.	22h. 00m.
Horizontal Force..	02½	02
Declination	05	
Vertical Force....	07½	04
Declination	10	06
Horizontal Force..	12½	08
Declination	15	
Vertical Force....	17½	10
Declination	20	12

METEOROLOGICAL.

Class of Observ'ns.	Times recommended by Com. of Physics and Meteorology.	Times at which the observations were taken at the Observatory.			
		Bi-hourly.	Hourly.	Twice a day.	Hourly.
Ordinary Meteorological.	Bi-hourly at the even Göttingen hours 0. 2. 4. &c.	June '40 to Feb. '41 at 6m. aft. ev'n hours.	March to Dec. 1841 Jan. to Dec. 1842, at 4m. aft. ev'n hours. 19m. bef. ev'n hours*.	Jan. to March 1843 at 12h. 34m.† & at 20h. 10m.†	Apr. '43 to June '45 at 19m. bef. even hours*
Meteorological on Magnetic Term Days.	Hourly at the even Göttingen hours 0. 1. 2. 3. &c.	Hourly at the times of ordinary meteorological observations.			
Meteorological on Meteorological Term Days.	Hourly at the even Göttingen hours 0. 1. 2. 3. &c.	The observations on the meteorological term days commenced at Göttingen noon.			

*Even hours Observatory. †Sunrise at Observatory. ‡2½ P. M. at Observatory.

ORGANIZATION OF THE OBSERVATORY.

The first assistant was on duty from 8h. A. M. (Observatory time, civil reckoning) till 4 P. M. The remaining sixteen hours of the twenty-four were divided among four sets of sub-assistants. A great many means were used to stimulate the young observers. Rewards were given to each observer who registered all his observations punctually during a month, and fines were imposed whenever observations were missed or taken late. When the observations were made bi-hourly, the sub-assistant on duty marked his attendance upon a register invented by Mr. Solon W. Hall, and attached to the side of the clock of the anemometer. This register was pricked through a hole in the side of the clock, and if it was not attended to at the time of the observation, it fell below its place, and thus recorded the absence of the observer. When the hourly observations commenced two assistants were placed on duty at the same time, at separate instruments, to be a mutual check. They reviewed the calculations made by the previous set of observers, and by each other. The first assistant, on duty, reviewed the work of the night, saw that no manifestly wrong observations had been made, that the means had been correctly computed, instruments left in adjustment, observations recorded distinctly, &c. He also observed for time, and inserted the times of the observations in the record books for the succeeding night. At the end of the month, the books were handed to a person whose business it was to make out the abstracts of them, and to compute the daily and hourly means of the ordinary observations. Here was another difficulty, as it was not possible to keep a competent person regularly for this purpose; the only one, in fact, previous to April, 1843, who was found to do this work satisfactorily was Professor Chauvenet, who took charge of it for a year from June, 1840. The abstracts were made out satisfactorily and with regularity at the Observatory, from April, 1843, to March, 1844, by Joseph S. Ruth, and from March, 1844, to June, 1845, by George Davidson. The duties, other than observing and computing, such as bringing water, making fires, cleaning lamps, keeping a supply of oil, &c., were divided among the sub-assistants.

CLASSIFICATION OF THE OBSERVATIONS.

From the commencement of the Observatory till the close of 1841, the observations were of the following classes: ordinary magnetic and triple, term day magnetic, ordinary meteorological, and meteorological on term days. In 1842 four classes were added to these, viz: extraordinary magnetic, (maxima and minima,) extraordinary magnetic, (on occasions of unusual readings of the magnetometers,) time of vibration of the magnetometer bars, and magnetic dip. The meteorological observations on term days are not found, as a class, after 1841, as the ordinary observations were then made hourly, instead of bi-hourly as before. In 1843 the observations of the time of vibration of the magnetometer bars were not continued, as the danger of disturbing their adjustments was found to be too great. The observations of the magnetic dip were discontinued in July, 1844. In this year a series of observations will be found intended to be taken in concert with Lieutenant Le-froy, R. A., and the Toronto Observatory. With the exception of this last class, the observations of 1844 and 1845 are similar in classification to those of 1843.

EXAMINATION OF PRINTED OBSERVATIONS.

Arrangement.—The observations of each year are placed together, and each class by itself, according to the date. The order of the classes is that in which they are spoken of in the "Classification." The four extra classes of 1842 follow the term day magnetic. That in connection with Lieutenant Lefroy precedes that of the magnetic dip in 1843. The last page of each month of the ordinary magnetic, contains the triples. In all the magnetic observations previous to 1843, with the exception of those on term day and those on occasions of unusual readings of the magnetometers, the three instruments are thus arranged, declination, vertical force, horizontal force. In the first quarter of 1843, the vertical force is first in order, subsequently, the arrangement is declination, horizontal force, vertical force. This last is the order in all the term day magnetic and those on occasions of unusual readings. Following the observations of 1845, are the abstracts of the magnetic and meteorological means. Those of each year are placed together in the following order: first, ordinary magnetic means; second, abstract of magnetic dip; third, ordinary meteorological means. The ordinary means are divided into daily; hourly; quarterly, half yearly, and yearly at the different hours; monthly; quarterly, half yearly, and yearly of the monthly means.

Reduction of Observations.—Ordinary Magnetic.—The times at the Observatory and at Göttingen are stated in the tables. The hours are counted from 0 to 24 for the sake of convenience. The time is civil reckoning. The daily, hourly, and monthly means of the readings are made out upon the pages, and these are reduced in a separate column to 32° Fah. by the coefficients calculated in another part of this preface. The coefficient of temperature for the horizontal force is stated there to have decreased three-tenths of a division for each degree Fahrenheit, yearly. It is considered in these reductions to have decreased one-tenth in four months. The temperatures were noted by thermometers made by Francis, of Philadelphia, placed within the boxes containing the magnetometers. The scales were divided to half degrees, and read by verniers to tenths. Previous to July 20th, 1840, the declinometer observed was a subsidiary one in the College building. The means of the readings are reduced to those of the Observatory by subtracting 144.7 divisions at 628.8, taking into consideration the difference of the values of the scales, that of one division of the subsidiary is equal to $20''.7$, and that of one division of the instrument in the Observatory is equal to $27''.3$. The Lloyd vertical force was first observed in the College building, and was removed to the Observatory on the 18th of July, 1840. The means of the readings in the College building are reduced to the Observatory only in the abstracts of the means at the close of the observations. The horizontal force magnetometer remained in the Observatory, and requires no correction for these changes. Notices of temporary corrections that have been applied to the readings of the three instruments from time to time, will be found throughout the work. The readings were several times permanently changed by accidents. On these occasions observations were usually made immediately for the value of the change, to reduce the readings to one series. In the abstracts of the means at the close of the observations, all these changes are taken into consideration, and the means there reduced to one series, from the commencement of the observations till their close. In the body of the work these corrections have not all been applied. Notices of them will, however, be found where they occur. The following is a statement of them and where

they have been applied. It was the intention, at first, to reduce the observations of each year to a series in the body of the work, and then reduce the years to one series in the abstracts of means. But some changes were discovered after the publication commenced, which partially defeated the plan. After June, 1841, however, only one correction is to be applied, which was caused on the 9th of August, 1843, by the suspension threads of the declinometer giving way. The instrument was examined for torsion, inclination of mirror, &c., on the 24th, but no change could be discovered. The effect of torsion for 180° was only 17.1 divisions. The readings were, however, eighteen divisions below those before the 9th. On the 10th of January, 1844, at 2h., the suspension fibres of the declinometer were broken by one of the observers. A new suspension was adjusted at 17h. on the 12th. The readings returned nearly to those prior to August 9th, 1843. A mean of the two changes has been applied in the body of the work to the means of the previous observations in 1844, and the means of the observations previous to the change, in the last six months of 1843, have been reduced to the standard of the interval. These then require to be increased 18.7 divisions to be brought into the general series, which has been done in the abstracts of means. Previous, to June, 1841, there were two changes in the declination. The first was on the 23d of November, 1840, when the bar fell below its proper plane. When readjusted, the readings were 19.5 divisions below the former ones. This correction is not applied in the body of the work, but is applied in the abstracts of means. The second was in January, 1841, when the new vertical force instrument was introduced. The readings of the declinometer were thereby increased 112.8 divisions. This correction is applied to the first six months of 1841, to reduce the means to those of 1840, after the 23d of November.

On the 4th of September, 1841, it was observed that the declinometer had changed very little for two or three days. It was examined at 14h., and a small spider, less in size than the head of a pin, was found between the rings below the stirrup. The observer passed his hand completely around the bar, but no attachment was discovered. The succeeding observations presented the same appearance.

On the 29th of November, 1841, at 20h. an oil can and lamp feeder, notwithstanding the positive rules of the Observatory prohibiting the bringing of iron, &c., near the magnetometers, were found in the computing room, on the side nearest the declinometer. The instrument read 553.5. After removing them the reading was 563.6.

There were three permanent changes of the readings of the horizontal force magnetometer, all during the first half year of 1841. The first was on the 6th of February at 0h. The instrument was examined on the 8th at 22h., and the wires found to be slightly disarranged. When readjusted, the instrument did not return to its former readings. No account could be had of any accident to it. The correction to reduce the previous readings to subsequent ones was +116 divisions, which has been applied to the month of February. The second was on February 22d at 6h., when the alidade of the instrument was moved. It was adjusted at 16h. The correction to the interval +25.1 has been used only in the abstracts of means. At 22h., the instrument was disturbed. The correction to reduce previous observations to new standard was +92.8, which has been applied also only in the abstracts of means. The third was on the 2d of June, when the wires were accidentally struck, and the instrument disarranged. As the readings were

of declination. The change of force, indicated by a change of reading in the Lloyd vertical force, has already been described.

In the general notes preceding the observations of each half year, will be found a description of the instruments, the values of their scales, the corrections used for temperature, &c.

In the ordinary magnetic and maxima and minima observations, commencing with the latter in 1842, such lost observations as have been supplied, will be found noted upon the pages where they occur. In the abstracts of means, *all* the ordinary magnetic observations omitted in observing, have been *supplied*, with the exception of the whole days which were lost on the following occasions. In the declination observations, January 1st to 12th, 1841, when the instruments were rearranged, and January 11th, 1844, when the declinometer was disturbed. In the horizontal force observations, January 1st to 12th, 1841, when the instruments were rearranged. In the vertical force observations, November 23d, 1840, when the instrument was disturbed; the month of January, 1841, when the reflecting vertical force was introduced, and May 22d to 31st, 1841, when it was readjusted.

In computing the means of the maxima and minima observations for the purpose of representing them in curves, where the greater portion of a set was not lost, all the omitted observations have been supplied. Where the greater portion of a set was lost, the remaining portion of that set has been left out in the means.

The rule for supplying used, where applicable, was to calculate the effect of the observation immediately before, and of the one immediately after the omitted ones upon the means at their respective times, and to interpolate for the effects upon the means at the times of the lost observations.

Meteorological.—The Observatory times, civil reckoning, will be found upon the pages, the hours being counted from 0 to 24 for convenience. The observations of the barometer are reduced to 32° Fahrenheit, and corrected for capillarity by the tables given in the report of the Committee of Physics and Meteorology of the Royal Society. The observations found in the column headed "Dew Point, Fah." in 1840 and 1841, were made with the Daniell's hygrometer D is the temperature of the dew point, and A that of the air. Previous to 21st of November, 1840, the temperature of the air is that given by the thermometer attached to the hygrometer. The heat of the observer's lamp affecting this thermometer, in all the *night observations* after this date, the temperature of the air recorded is that given by the Observatory standard thermometer. In 1842 these observations will be found at the bottom of the page, the observation of the standard thermometer giving the temperature of the air. In 1843 the new dew point instrument was introduced. The elastic force of aqueous vapor, corresponding to the temperature of the wet bulb thermometer, is taken from the table found in the Edinburgh Encyclopædia, vol. xi. page 10. The formulæ used to calculate the quantities found in the columns headed "Force of Vapor, ins.," are from the experiments of Dr. Apjohn, recorded in the Transactions of the Royal Irish Academy, vol xvii. pp. 275 *et seq.*, and in the Proceedings, 1840. The formula used when the temperature of the wet bulb was above 32° was $f' = .0114 (t - t') \frac{p - f'}{30}$, when the temperature of the wet bulb was below 32° the formula used was $f' = .01017 (t - t') \frac{p - f'}{30}$, where f' represents the force of vapor at the temperature of the dew point, f' that at the temperature of the wet bulb, t and t' the temperatures of the

near the end of a scale that had been attached to the original one, it was thought best to rearrange the instrument so as to bring it to about 500 the middle of the scale, when the other instruments were out of the Observatory. The correction to reduce the position of June 1st, to that from June 1st to 5th, is -213 , and from that to the new position -687 . The whole correction to the old readings was about -900 divisions. This has been applied in the month of June, reducing the means to both the old and new position of the magnetometer.

The permanent changes of the readings indicating the vertical force were five in number. The first was, when the Lloyd vertical force instrument was brought into the Observatory from the College building. By comparing the mean of the observations for ten days before the removal, with that for ten days after, it was found that the reading 354. in the College building corresponded to the reading 99.4 in the Observatory. Also an increase of one division in the College building corresponds to a decrease of one division in the Observatory, and to decrease of force. This correction has not been applied in the body of the work, but like the others, it has been used in the abstracts of means. The second was on the 29th of October, 1840, at 1h. 57m., when the instrument was disturbed. The correction to the previous readings of $+120.3$ has been used only in the abstracts of means. The third was on the 23d of November, caused by the raising of the bar of the declinometer. The correction -305.6 divisions to previous readings, has been applied only in the abstracts before spoken of. The fourth was on the occasion of the new vertical force being brought into the Observatory, in January, 1841. By a comparison made February 9th, 1841, it was found that the reading 87.4 of the old instrument in the College building, or its equivalent 366 in the Observatory, corresponded to 535.1 of the new instrument. Also an increase of two divisions of the old instrument in the Observatory, corresponded to a decrease of one division in the new. This correction has been applied only in the abstracts of means. The fifth was on the 24th of May, when the balance of the instrument, but not the sensibility, was altered. This was rendered necessary, by the bar losing its magnetism very rapidly, when first put up. The correction $+529$ to reduce the bar to the old position, has been applied in the month of June.

The full series of observations were discontinued at the end of 1842. One observation was, however, made each day on the three magnetometers, at 20h. 00m. until April, 1843, when the full series was resumed.

On the 15th of April, the adjustments of the instruments were examined. The horizontal and vertical force instruments were found to be in adjustment. The declinometer was out of level and position. The correction to reduce the reading to the true reading, was $+1.66$.

The *term day*, *disturbance* and *triple* observations have not been corrected for temperature, or for the various changes just described. The *maxima* and *minima* have been corrected for temperature. During these observations only one correction is to be applied for changes in the instruments. This is in the declinometer, from August 9th, 1843, till January 10th, 1844, which has already been described. This correction has been applied to the means of these observations in the month of January, 1844. In the curves representing these observations, it has been applied to the whole interval.

The words, *as before*, found occasionally in 1840, signifies that there has been no change in the instruments since the preceding month.

Increase of reading in the horizontal and reflecting vertical force instruments, corresponds to decrease of force, and in the declinometer, to decrease

dry and wet bulb thermometers, and p the height of the barometer. The thermometers registering the temperature of the dew point were compared with the standard thermometer, and where there was a difference the reading has been corrected before entering it upon the abstracts. From June 1st, 1841, till the beginning of 1843, the direction of the wind was registered in degrees reckoning from the south as zero, round through the west. Points of the compass were used to register the direction of the wind during the other periods of the Observatory. The means however are all made out in points of the compass. The force of wind is in pounds to the square foot. The force of light winds was imperfect. The snow gauge, constructed as described in another part of this preface, was defective in its register. The total amount of snow fallen will be found noted upon the pages, from time to time, where it could be ascertained.

The extent of sky covered was recorded in eights until June, 1841, when it was changed to tenths. Howard's nomenclature of clouds is used. The direction from which the clouds were moving will be found noted. It was intended that the direction of the motion of their strata should be noted, but the time which this required interfered with the other observations, and in consequence, it will be found only occasionally. No. 1 refers to the lowest stratum, and No. 3 to the highest. Some remarks upon the tornado of the 5th of August, 1843, are made upon page 1158. The following abbreviations are used: Cu. for cumulus; Ci. for cirrus; S. for stratus; N. for nimbus; Ci-s, for cirro-stratus; Ci-cu, for cirro-cumulus; Cu-s, for cumulo-stratus; Fl. for rapidly moving clouds; Cl. for clear; Cly. for cloudy; Hor. for horizon; Exc. for except.

Abstracts of Means.—These contain the ordinary magnetic and meteorological observations, and those of the magnetic dip. The means of the ordinary observations consist of the daily; the hourly; the quarterly, half-yearly, and yearly at the different hours; the monthly and their quarterly, half-yearly, and yearly means. The mean of each set of observations made for the magnetic dip, will here be found tabulated. The observations omitted in observing have been supplied by the rule already described. The magnetic means are here reduced to one series, from the commencement of the observations till their close. A list of the corrections used in the reductions, a description of the instruments and of their results, the values of the scales of the magnetometers, the coefficients for the corrections for temperature, a list of the times in which observations were made on occasions of unusual readings, &c. will be found in the general notes preceding the magnetic and meteorological means in each year.

A. D. BACHE.

NOTE.—To the list of principal subscribers, on page III, the names of T. Dunlap, N. Dunn, J. D. Brown, J. P. Weiheril, H. Kuhn, G. M. Justice, and A. D. Bache should be added.



ERRATA IN PRINTED PAGES.

☐ Where both the Göttingen and Observatory times are stated on the pages, the former is referred to in the following list.

Page	2. 14th line from top.....	for	.000,040 read	.000,036.5
	6. In note at bottom.....	for	.000,040 read	.000,036.5
	8. Heading, Observatory time, Declination.....	for	2.12 read	8.12
	9. Monthly mean.....	for	498.05 read	496.4
	17. Year.....	for	1830 read	1840
	19. Heading.....	for	August read	August
	20. 6th, mean.....	for	809.9 read	812.4
	11th, mean.....	for	820.9 read	821.2
	6th, reduced mean.....	for	662.1 read	664.6
	11th, reduced mean.....	for	685.5 read	684.2
	18th, reduced mean.....	for	682.7 read	677.7
	22d, reduced mean.....	for	758.6 read	740.0
	21. 15th at 14 h. 02½ m.....	for	63.9 read	73.9
	11th, mean.....	for	74.3 read	74.8
	22d, mean.....	for	74.2 read	80.0
	30. 22d, at 13 h. 57½ m.....	for	-51.1 read	51.1
	Mean at 13 h. 57½ m.....	for	285.8 read	289.6
	Reduced mean at 13 h. 57½ m.....	for	366.6 read	370.4
	22d, mean.....	for	16.6 read	25.9
	Monthly mean.....	for	233.33 read	233.6
	22d, reduced mean.....	for	107.4 read	116.7
	Reduced monthly mean.....	for	319.88 read	320.2
	Insert "On the 29th at 1 h. 57 m. the vertical force instrument was disturbed. A correction of -120.3 divisions should be applied to all the succeeding observations of the year."			
	32. Reduced mean at 0 h. 02½ m.....	for	751.8 read	753.0
	Reduced mean at 2 h. 02½ m.....	for	753.8 read	755.0
	16th, reduced mean.....	for	730.4 read	735.9
	Reduced monthly mean.....	for	754.82 read	755.2
	34. 22d at 13 h. 57½ m.....	for	-51.1 read	51.1
	35. Insert "On the 23d the bar of the declinometer had fallen below its proper plane. The difference between the old and new readings was found to be 19.5 divisions, which should be subtracted from the preceding observations of this year."			
	36. Insert "On the 23d the vertical force needle was altered by the bar of the declinometer being raised. A correction of +305.6 divisions should be applied to the succeeding observations of this year."			
	38. Reduced mean at 18 h. 02½ m.....	for	787.2 read	797.2
	51. Observatory times, for 22 m., 32 m., &c. read 27 m., 37 m., &c.			
	53. Note at bottom of page.....	for	0.000.140 read	0.000.036.5
	56. Note at bottom of page.....	for	0.000.040 read	0.000.036.5
	74. 8th line from top.....	for	← read	112.3
	3d line from bottom erase first "Ci-cu for cirro-cumulus."			
	77. 5th at 2 h. 25 m., clouds.....	for	Cu-ci read	Cu, Ci.
	82. 17th at 6 h. 25 m. clouds.....	for	Cu-ci read	Cu, Ci.
	131. 9th at 4 h. 25 m. dry thermometer.....	for	65.1 read	55.1
	150. Barometer, ob's'd. h'g't, millimetres on the 20th, 0 h. 25 m. for		*758.65 read	758.65
	170. Third line, insert after magnetic "and meteorological," and cancel last line.			
	178 to 184. For Göttingen time, read Observatory time.			

Page 186.	14th line from top.....	for	.000.140 read	.000.036.5
	21st line from top.....	for	+520 read	+529
	2d line from bottom.....	for	.000.040 read	.000.036.5
	Bottom line.....	for	.000.042 read	.000.035
187.	Mean at 6 h. 00.....	for	577.8 read	578.4
	Reduced mean 6 h. 00.....	for	465. read	465.6
191.	For Reduced to 32° Fahr. read Reduced means.			
192.	Insert "Increase of numbers corresponds to decrease of force."			
194.	Insert "On the 6th at 0 h. 02½ m. a great change in position of horizontal force noted. Instrument examined on February 8th at 22 h. 49½ m., wires found to have been slightly deranged. On rearranging, did not return to former readings. No account could be had of any accident to instrument. A correction of +116 divisions has been applied to previous observations on this page, in computing the means." Insert also "At 6 h. 02½ m. on the 22d, alidade of instrument moved. Adjusted after the observation at 16 h. 02½ m. A correction of +25.1 should be applied to the observations during the interval. At 22 h. 02½ m. instrument disturbed. A correction of +92.8 divisions should be applied to the preceding observations of this year."			
195.	25th, mean.....	for	30.4 read	30.1
212.	No. of page.....	for	112 read	212
215.	26th, mean.....	for	575.6 read	567.3
	Monthly mean.....	for	571.5 read	571.2
	26th, reduced mean.....	for	462.8 read	454.5
	Reduced monthly mean.....	for	458.7 read	458.4
224.	For corrected means read reduced means.			
235.	Insert "On the 4th, observing that the instrument had changed very little during the last two days, it was examined at 14 h. 00 m. A small spider, less than the head of a pin, was found between the rings below the stirrup. The observer passed his hand completely around the needle, but no attachment could be discovered. The succeeding observations presented the same appearance as the preceding."			
247.	Insert "On the 29th at 20 h. 00 m., an oil can and lamp feeder were found in an adjoining room on the side nearest the declinometer. The instrument then read 553.5. After removing them to opposite side of room the reading was 563.6."			
	29th, at 10 h. 00 m.....	for	588.2 read	558.2
	Mean, at 10 h. 00 m.....	for	559.4 read	558.2
	19th, at 12 h. 00 m.....	for	588.6 read	538.6
	Mean, at 12 h. 00 m.....	for	557.7 read	555.8
	4th, at 4 h. 00 m.....	for	265. read	565.0
	19th, mean.....	for	563.9 read	559.7
	29th, mean.....	for	563.9 read	561.4
	Monthly mean.....	for	556.3 read	556.1
323 and 324.	Under column of hour.....	for	m. s. read	h. m.
356 and 357.	Under column of hour.....	for	m. s. read	h. m.
380.	1st line from the top, for "a new spring was," read "new springs having been." 1st and 2d lines from the top, for "which decreased," read "a satisfactory determination was made of." 2d line from the top, insert "The observations recorded cannot, however, be depended upon until July, 1841."			
382 to 407.	Under column of hour.....	for	00 m. read	15 m.
383 and 387.	Under column of hour.....	for	m. s. read	h. m.
425.	At 6 h. 15 m. Obs'd. H. Mill. Barometer, insert 766.30			
489.	18th, at 6 h. 00 m. insert 561.			
	6th, at 2 h. 00 m.....	for	577.9 read	567.9
	11th, at 2 h. 00 m.....	for	576. read	577.0
	18th, at 2 h. 00 m.....	for	583.8 read	597.9
	6th, mean.....	for	559.8 read	559.0
	18th, mean.....	for	566.6 read	567.8
490.	21st, at 13 h. 58 m. insert 622.3			
	Mean, at 13 h. 58 m.....	for	664. read	662.4
	Reduced mean at 13 h. 58 m.....	for	195.8 read	197.0
	21st, reduced mean.....	for	171.7 read	178.9
491.	21st, at 13 h. 58 m. insert 61.2			
	Mean at 13 h. 58 m.....	for	66.7 read	66.5
	21st, mean.....	for	65.2 read	64.7
498.	16th, at 2 h. 02 m.....	for	552.6 read	652.6
510.	9th, reduced mean.....	for	506.6 read	507.1
	15th, reduced mean.....	for	531.1 read	551.1

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Page 514.	Reduced mean, at 13 h. 58 m.....for	179.2 read	177.8
	28th, reduced mean.....for	188.1 read	182.7
515.	Mean at 13 h. 58 m.....for	69.1 read	69.2
	28th, at 23 h. 58 m. insert 78.1		
	Mean at 23 h. 58 m.....for	71.2 read	71.4
	28th, mean.....for	73.3 read	73.7
530.	Mean at 23 h. 58 m.....for	748.3 read	748.1
522.	21st, at 14 h. 02 m.....for	610.1 read	670.1
523.	30th, at 12 h. 02 m.....for	78.6 read	73.5
	Mean at 12 h. 02 m.....for	68.6 read	68.4
534.	Reduced mean at 23 h. 58 m.....for	174.4 read	184.4
536.	31st, at 12 h. 02 m. insert 705.0		
	Reduced mean at 12 h. 02 m.....for	601.6 read	602.2
	31st, mean.....for	724.3 read	722.6
	31st, reduced mean.....for	616.1 read	615.5
537.	31st at 12 h. 02 m. insert 68.7		
	Mean at 12 h. 02 m.....for	72.1 read	71.9
	31st, mean.....for	73.6 read	73.2
539.	Mean at 18 h. 00 m.....for	558.2 read	557.7
546.	Reduced mean at 13 h. 58 m.....for	220.2 read	217.7
547.	Mean at 13 h. 58 m.....for	72.8 read	73.0
548.	5th, at 12 h. 02 m.....for	691. read	696.0
	Mean at 12 h. 02 m.....for	752.8 read	752.0
	Reduced mean at 12 h. 02 m.....for	666.3 read	665.5
	4th, at 22 h. 02 m.....for	725. read	727.5
	5th, mean.....for	718.7 read	719.1
	5th, reduced mean.....for	631.5 read	631.9
557.	Mean at 2 h. 00 m.....for	562.5 read	563.5
558.	Mean at 13 h. 58 m.....for	673.8 read	674.1
	Reduced mean at 13 h. 58 m.....for	268.8 read	267.8
	Reduced mean at 15 h. 58 m.....for	262.4 read	265.1
	Reduced mean at 23 h. 58 m.....for	259.3 read	258.3
	10th, reduced mean.....for	255.3 read	252.6
559.	10th, at 13 h. 58 m. insert 66.6		
	Mean at 13 h. 58 m.....for	62. read	62.1
	10th, mean.....for	64.3 read	64.5
560.	Mean at 16 h. 02 m.....for	787.7 read	784.0
	Reduced mean at 16 h. 02 m.....for	726. read	721.9
561.	9th, at 16 h. 02 m. insert 61.7		
	Mean at 16 h. 02 m.....for	56.7 read	56.9
	9th, mean.....for	61. read	61.1
605.	Mean at 6 h. 00 m.....for	563.7 read	563.9
606.	12th, at 7 h. 18 m.....for	472.8 read	572.8
607.	Mean at 18 h. 00 m.....for	556.5 read	555.8
608.	3d, at 2 h. 00 m. insert 555.4		
	4th, at 2 h. 00 m. insert 563.4		
	5th, at 2 h. 00 m.....for	561.9 read	565.4
	15th, at 2 h. 00 m. insert 572.2		
	22d, at 2 h. 00 m. insert 574.2		
	25th, at 2 h. 00 m. insert 569.8		
	Mean at 2 h. 00 m.....for	568.5 read	567.3
614.	13th, thermometer at 14 h. 04 m.....for	68.7 read	67.8
	The thermometers at 14 h. 04 m. belong to 13 h. 58 m. where the corresponding reductions are applied.		
619.	Reduced mean at 2 h. 02 m.....for	482.5 read	482.1
	4th, thermometer at 2 h. 02 m.....for	65. read	65.6
	Mean of thermometer at 2 h. 02 m.....for	62.4 read	62.6
629.	28th, thermometer at 23 h. 58 m.....for	72.8 read	73.8
630.	Reduced mean at 13 h. 10 m.....for	254. read	255.1
	Reduced mean at 13 h. 16 m.....for	252.8 read	255.0
	Reduced mean at 13 h. 22 m.....for	251.3 read	254.6
	Reduced mean at 13 h. 28 m.....for	250. read	254.4
631.	Reduced mean at 13 h. 34 m.....for	248.2 read	253.6
	Mean of thermometer at 13 h. 34 m.....for	65. read	64.6
	Reduced mean at 13 h. 40 m.....for	249.1 read	253.6
	Reduced mean at 13 h. 46 m.....for	249.7 read	253.3

Page 631.	Reduced mean at 13 h. 52 m.....for	250.4 read	252.7
	Reduced mean at 13 h. 58 m.....for	250.4 read	252.5
	Reduced mean at 14 h. 04 m.....for	249.6 read	250.4
	4th, thermometer at 14 h. 04 m.....for	77.6 read	77.3
	Mean of thermometer at 14 h. 04 m.....for	64.7 read	64.6
	Reduced mean at 14 h. 10 m.....for	249. read	249.5
	The thermometers at 14 h. 04 m. belong to 13 h. 58 m., where the corresponding reductions are applied.		
648.	Reduced mean at 13 h. 46 m.....for	205.2 read	204.9
	Reduced mean at 13 h. 52 m.....for	204.8 read	204.3
	Reduced mean at 13 h. 58 m.....for	204.8 read	204.2
	Reduced mean at 14 h. 04 m.....for	204.7 read	203.9
	Reduced mean at 14 h. 10 m.....for	204.3 read	203.8
	Reduced mean at 14 h. 28 m.....for	203.4 read	203.8
	The thermometers at 14 h. 04 m. belong to 13 h. 58 m., where the corresponding reductions are applied.		
665.	Reduced mean at 13 h. 46 m.....for	193.5 read	193.1
	Reduced mean at 13 h. 52 m.....for	193. read	192.5
	Reduced mean at 13 h. 58 m.....for	192.5 read	191.9
	Reduced mean at 14 h. 16 m.....for	191.2 read	191.6
	Reduced mean at 14 h. 22 m.....for	191. read	191.6
	Reduced mean at 14 h. 28 m.....for	190.5 read	190.9
	The thermometers at 14 h. 04 m. belong to 13 h. 58 m., where the corresponding reductions are applied.		
670.	28th, at 2 h. 02 m.....for	562.5 read	563.5
672.	Reduced mean at 16 h. 32 m.....for	521.7 read	531.7
680.	Reduced mean at 23 h. 58 m.....for	180. read	180.5
682.	Reduced mean at 13 h. 46 m.....for	178.3 read	177.9
	Reduced mean at 13 h. 52 m.....for	178.8 read	178.2
	Reduced mean at 13 h. 58 m.....for	178.7 read	177.8
	Reduced mean at 14 h. 04 m.....for	178.4 read	178.0
	The thermometers at 14 h. 04 m. belong to 13 h. 58 m., where the corresponding reductions are applied.		
697.	Reduced mean at 23 h. 58 m.....for	168.7 read	169.0
699.	The thermometers at 14 h. 04 m. belong to 13 h. 58 m., where the corresponding reductions are applied.		
715 and 716.	A correction of +10.0 should be applied to reduced means.		
718.	The thermometer at 14 h. 04 m. belong to 13 h. 58 m., where the corresponding reductions are applied.		
719.	A correction of +6.0 should be applied to the thermometers on the 1st.		
	A correction of -0.7 should be applied to reduced means.		
	A correction of +0.3 should be applied to means of thermometer.		
721.	30th, at 22 h. 02 m.....for...	736.5 read	736.8
732 and 733.	A correction of +10.0 should be applied to reduced means.		
733.	Reduced mean at 23 h. 58 m.....for	174.9 read	174.4
735.	The thermometers at 14 h. 04 m. belong to 13 h. 58 m., where the corresponding reductions are applied.		
738.	11th, at 22 h. 02 m.....for	717.7 read	717.3
744.	Mean at 7 h. 06 m.....for	569.6 read	569.2
749.	Mean of thermometer at 22 h. 34 m.....for	76.8 read	76.5
752.	The thermometers at 14h. 04 m. belong to 13 h. 58 m., where the corresponding reductions are applied.		
755.	Mean at 22 h. 50 m.....for	744.1 read	742.4
	Reduced mean at 22 h. 50 m.....for	636.9 read	635.0
767.	Reduced mean at 23 h. 58 m.....for	236.3 read	236.8
769.	Reduced mean at 13 h. 46 m.....for	221.5 read	220.0
	Reduced mean at 13 h. 52 m.....for	220.5 read	219.1
	Reduced mean at 13 h. 58 m.....for	219.8 read	217.7
	Reduced mean at 14 h. 04 m.....for	219. read	216.8
	Reduced mean at 14 h. 10 m.....for	217.7 read	216.0
	Reduced mean at 14 h. 16 m.....for	216.5 read	215.3
	Reduced mean at 14 h. 22 m.....for	215. read	214.4
	The thermometers at 14 h. 04 m. belong to 13 h. 58m., where the corresponding reductions are applied.		
772.	Reduced mean at 22 h. 08 m.....for	681.8 read	680.8
776.	Reduced mean at 17 h. 26 m.....for	683.4 read	686.4

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Page	784.	Reduced mean at 23 h. 52 m.....for	250.7 read	250.4
		Reduced mean at 23 h. 58 m.....for	250.5 read	250.0
	785.	A correction of $-.7$ should be applied to the reduced means.		
	786.	Reduced mean at 13 h. 34 m.....for	260.6 read	261.3
		Reduced mean at 13 h. 52 m.....for	255.5 read	254.4
		Reduced mean at 13 h. 58 m.....for	254.2 read	252.6
		Reduced mean at 14 h. 04 m.....for	253. read	252.5.
		The thermometers at 14 h. 04 m., belong to 13 h. 58m., where the corresponding reductions are applied.		
	792.	Reduced mean at 16 h. 08 m.....for	714. read	715.3
		Reduced mean at 16 h. 14 m.....for	714.8 read	716.1
		Reduced mean at 16 h. 20 m.....for	714.5 read	715.8
		Reduced mean at 16 h. 26 m.....for	714.4 read	715.7
	802.	Reduced mean at 13 h. 04 m.....for	266.1 read	266.8
	803.	Reduced mean at 13 h. 58 m.....for	267.5 read	267.8
		The thermometers at 14 h. 04 m. belong to 13 h. 58m., where the corresponding reductions are applied.		
	804.	Reduced mean at 11 h. 32 m.....for	710.1 read	706.7
		A correction of -6.0 should be applied to thermometers on 13th.		
		A correction of -4.4 should be applied to reduced means.		
		A correction of -0.2 should be applied to means of thermometers.		
	824.	4th line from top.....for	northeast read southeast.	
	876.	At 11 hours, corrected height of bar. No. 1.....for	30.528 read	30.258
	909.	At 22 hours, corrected height of bar. No. 1.....for	30.434 read	30.334
	1166.	7th line from top, omit "times of observation."		
	1168.	25th, at 20 h. 00 m.....for	557. read	554.3
	1171.	17th, at 12 h. 02 m.....for	873.8 read	875.8
	1173.	Reduced mean at 20 h. 04 m.....for	210.1 read	211.5
		Mean at 22 h. 04 m.....for	757.7 read	762.9
		Reduced mean at 22 h. 04 m.....for	216.4 read	221.6
		12th, mean.....for	833.1 read	833.8
		14th, mean.....for	770.5 read	777.0
		24th, mean.....for	753.1 read	753.4
		29th, mean.....for	701.6 read	704.9
		Monthly mean.....for	762. read	762.4
		12th, reduced mean.....for	245.9 read	246.6
		14th, reduced mean.....for	227.8 read	234.3
		24th, reduced mean.....for	203.7 read	204.0
		29th, reduced mean.....for	206.2 read	209.5
		Reduced monthly mean.....for	231.4 read	232.4
	1176.	17th, at 2 h. 00 m.....for	568. read	569.7
		18th, at 2 h. 00 m.....for	569.7 read	564.7
		Mean at 2 h. 00 m.....for	566.5 read	566.7
		18th, mean.....for	565.1 read	564.7
	1177.	In note at bottom of page for 2 h. 19½ m. read 2 h. 21½ m.		
	1190.	4th line from top, insert, "The instrument, in 1844, returned to its former reading. A mean of the two changes 18.7 has been used to correct the previous observations of this half-year."		
	1191.	Subtract .7 from the means called "New Position."		
	1194.	3d, at 2 h. 04 m.....for	786.3 read	787.3
	1195.	26th, at 8 h. 04 m.....for	78.8 read	78.1
	1197.	10th, at 18 h. 00 m.....for	550.1 read	530.1
		Mean at 18 h. 00 m.....for	532.3 read	532.1
		From hourly means subtract .2.		
		From daily means, previous to 10th subtract .7.		
		Monthly mean.....for	542.8 read	542.6
		In note at bottom of page.....for	April read	July
	1208.	16th, at 13 h. 54 m.....for	445.6 read	545.6
	1212.	Heading at 22 h. 02 m. for 22 h. 02½ m. read 22 h. 02 m.		
	1265.	At 3 h. 36 m.....for	663.8 read	563.8
	1271.	At 16 h. 48 m.....for	340.4 read	540.4
	1277.	At 0 h. 42 m.....for	640.9 read	540.9
	1294.	Mean at 1 h. 50 m.....for	878.7 read	874.7
		Reduced mean at 1 h. 50 m.....for	795.1 read	791.1
	1295.	Mean at 2 h. 14 m.....for	876.7 read	872.7
		Reduced mean at 2 h. 14 m.....for	793. read	789.0

Page 1310.	Mean at 22 h. 44 m.....for	869.6 read	871.
	Reduced mean at 22 h. 44 m.....for	779.5 read	781.
1323.	30th, at 3 h. 36 m.....for	563.6 read	573.
	10th, at 3 h. 42 m. insert 566.7		
	Mean at 3 h. 42 m.....for	365. read	565.
	10th, at 3 h. 48 m.....for	545.8 read	565.4
	Mean at 3 h. 48 m.....for	564.6 read	565.4
	10th, at 3 h. 54 m.....for	573.4 read	570.3
1333.	30th, at 23 h. 04 m.....for	866.1 read	869.1
1349.	Mean at 2 h. 26 m.....for	955.3 read	955.7
	Reduced mean at 2 h. 26 m.....for	846.5 read	846.1
1361.	Heading for minimum read minimum.		
1369.	Mean at 22 h. 58 m.....for	837.7 read	828.7
	Reduced mean at 22 h. 58 m.....for	176.2 read	177.2
1458.	2d, at 23 h. 14 m. thermometer.....for	79.9 read	72.9
1484.	12th line from top.....for	11 read	12
	14th line from top.....for	12 read	13
	22d line from top.....for	15 read	16
	25th and 26th line from top.....for	16 read	17
	27th and 28th line from top.....for	17 read	18
	30th line from top.....for	18 read	19
1487.	At 23 h. 16 m.....for	353.2 read	853.2
	At 1 h. 22 m.....for	675. read	875.0
1488.	At 2 h. 40 m.....for	561.1 read	861.1
1500.	At 8 h. 22 m.....for	624.3 read	642.3
1534.	Head of the page for June 26th read June 20th.		
1537.	Magnetic Intensity; erase "Intensity by 24 observations, 2.45.35."		
1538.	July 20th; erase "Intensity by 24 observations, 20.00.10."		
1540.	Magnetic Dip, Needle No. 3 (Lloyd) with A end N for 71° 51' read 71° 51' 17.		
1635.	At 2 hours, corrected height of barometer.....for	30.102 read	30.002
1646.	At 11 hours, corrected height of barometer.....for	30.399 read	30.299
1663.	At 8 hours, corrected height of barometer.....for	30.127 read	30.027
1712.	At 4 hours, hygrometer.....for	88. read	98.0
1739.	At 18 hours, clouds.....for	Ci-cu read	Ci, Cu,
1743.	At 21 hours, force of vapor.....for	612 read	512
	At 21 hours, calculated dew point.....for	64.7 read	59.3
1768.	At 3 hours, corrected height of barometer.....for	80.156 read	30.156
1770.	At 4 hours, observed height of barometer.....for	761.00 read	760.00
1818.	3d line from top.....for	27" 2 read	27" 3
	4th line from top.....for	.000,040 read	.000,036.5
1819.	25th, at 11 hours.....for	557.5 read	560.4
	From hourly means subtract .3		
	In note at bottom of page.....for	+19.5 read	+18.7
	In note at bottom of page.....for	13th read	12th
1820.	From hourly means, subtract .3		
	From daily means, previous to 11th, subtract .8.		
	Monthly mean.....for	558.3 read	558.0
1826.	Reduced mean at 23 h. 04 m.....for	294.6 read	295.7
1840.	29th, at 14 h. 06 m.....for	561.4 read	561.9
1841.	30th, at 7 h. 00 m.....for	591.6 read	592.1
1844.	6th, at 19 h. 02 m.....for	1078.7 read	1068.7
	Mean at 19 h. 02 m.....for	1062.9 read	1062.5
	Reduced mean at 19 h. 02 m.....for	998. read	997.6
	6th, mean.....for	1059.4 read	1059.0
	6th, reduced mean.....for	995.8 read	995.4
1847.	Reduced mean at 9 h. 04 m.....for	294.6 read	297.3
1848.	30th, reduced mean.....for	311.1 read	308.4
1849.	30th, at 9 h. 04 m.....for	69.7 read	64.7
	Mean at 9 h. 04 m.....for	67.2 read	67.0
	6th, at 17 h. 04 m.....for	70.3 read	70.9
1850.	30th, mean.....for	64.2 read	64.0
1855.	For April 17 read April *17.		
1870.	Reduced mean at 22 h. 04 m.....for	269.6 read	270.9
1875.	Mean at 3 h. 00 m.....for	546.9 read	548.6
1876.	Mean at 17 h. 02 m.....for	1096.5 read	1096.9
	Reduced mean at 17 h. 02 m.....for	1016.7 read	1017.1

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Page 1877.	Reduced mean at 21 h. 02 m.....for	998.8 read	999.1
1890.	Reduced mean at 21 h. 02 m.....for	1021.3 read	1023.1
	Reduced mean at 1 h. 02 m.....for	1030.3 read	1029.3
1899.	Mean at 2 h. 00 m.....for	549.2 read	548.8
1901.	Reduced mean at 21 h. 02 m.....for	1046.6 read	1045.6
1912.	Mean at 23 h. 02 m.....for	1122.8 read	1123.2
	Reduced mean at 23 h. 02 m.....for	1040.7 read	1041.1
	6th, at 1 h. 02 m.....for	1113.8 read	1138.0
1915.	Reduced mean at 14 h. 04 m.....for	337.5 read	332.2
1917.	19th, at 14 h. 04 m.....for	71.5 read	71.8
1922.	30th, at 16 h. 02 m.....for	1121.9 read	1131.9
1923.	30th, mean.....for	1116. read	1114.7
	30th, reduced mean.....for	1163.9 read	1162.6
1926.	Reduced mean at 13 h. 04 m.....for	313.8 read	313.6
	Reduced mean at 14 h. 04 m.....for	305.6 read	305.3
1932.	9th, at 2 h. 00 m.....for	556. read	546.0
1933.	Reduced mean at 17 h. 02 m.....for	1089.7 read	1089.3
1949.	Reduced mean at 23 h. 04 m.....for	310.7 read	309.7
1952.	23d, at 14 h. 10 m.....for	791.9 read	789.8
1956.	At 5 h. 38 m.....for	1021.7 read	1021.5
1962.	At 8 h. 26 m.....for	1747.2 read	1047.2
1964.	At 15 h. 54 m.....for	541.9 read	541.0
1995-2000.	Subtract .3 from means.		
1995.	In note at bottom of page.....for	+19.5 read	+18.7
2030.	30th, at 7 h. 00 m.....for	591.6 read	592.1
2045.	6th, at 14 h. 28 m. thermometer.....for	69.6 read	70.1
2047.	27th, at 7 h. 00 m.....for	539.8 read	539.2
2051.	17th, at 13 h. 36 m.....for	534.1 read	524.1
	Mean at 13 h. 36 m.....for	562. read	561.6
2065.	Mean at 18 h. 06 m.....for	537.2 read	537.8
2096.	22d, at 14 h. 04 m.....for	825.7 read	825.0
2116.	24th, at 6 h. 12 m.....for	555.2 read	553.2
2122.	A correction of +1.0 should be applied to reduced means at 12 h. 14 m. and 12 h. 20 m.		
2137.	14th, at 3 h. 30 m.....for	558.3 read	559.3
2157.	Mean of thermometer at 21 h. 02 m.....for	71. read	71.9
2171.	Mean at 3 h. 24 m.....for	551.7 read	549.4
2182.	22d, at 13 h. 04 m.....for	836.1 read	836.4
2194.	Reduced mean at 2 h. 44 m.....for	1244.5 read	1144.5
2209.	At 16 h. 54 m.....for	562.2 read	552.2
2219.	At 4 h. 04 m. thermometer.....for	60.3 read	57.2
2221.	For March 30th read March 29th.		
2224.	At 23 h. 42 m. 30 s.....for	1199.4 read	1099.4
	At 1 h. 02 m.....for	+1126.4 read	1126.4
2227.	At 14 h. 58 m.....for	505.2 read	805.2
2269.	At 21 h. 28 m.....for	778.2 read	768.2
2275.	At 7 h. 10 m.....for	899.3 read	799.3
2277.	For December read July.		
2285.	April 2d, A end N, 8th observation of N. end needle...for	72.20 read	72.28
	April 2d, A end N, 3d mean.....for	71.03 read	72.03
2287.	April 23d, dip with A end N.....for	71° 57'.41 read	71° 55'.75
	April 23d, dip by 24 observations.....for	71° 53'.39 read	71° 52'.56
	April 30th, dip with B end N.....for	71° 56'.54 read	71° 51'.54
	April 30th, dip by 24 observations.....for	71° 58'.56 read	71° 56'.06
2288.	May 7th, dip with A end N.....for	71° 57'.08 read	71° 57'.17
	May 7th, dip by 24 observations.....for	71° 55'.81 read	71° 55'.85
	May 14th, dip with B end S.....for	71° 59'.90 read	71° 59'.00
2613.	Head of page, for Declinatoin read Declination.		
2619.	Mean at 14 h. 04 m.....for	714. read	715.1
	Reduced mean at 14 h. 04 m.....for	311.7 read	312.8
2620.	Reduced mean at 23 h. 04 m.....for	312.6 read	311.2
2630.	Mean at 14 h. 04 m.....for	633.5 read	634.4
	Reduced mean at 14 h. 04 m.....for	327.1 read	328.0
2631.	22d, at 20 h. 04 m.....for	764.9 read	784.9
	Mean at 20 h. 04. m.....for	658.6 read	659.4
	Reduced mean at 20 h. 04 m.....for	300.9 read	301.7
	22d, mean.....for	776.2 read	777.0

Page 2631.	22d, reduced mean.....	for	303.8 read	304.
2641.	20th, at 11 h. 04 m.....	for	492.8 read	492.
	20th, at 12 h. 04 m.....	for	482. read	484.
2645.	4th, at 13 h. 58 m.....	for	750. read	698.
	4th, at 14 h. 04 m.....	for	698.9 read	696.
	4th, at 14 h. 10 m.....	for	698.6 read	696.
2656.	29th, at 14 h. 10 m.....	for	843.7 read	843.
2657.	31st, at 8 h. 00 m.....	for	538.5 read	508.
2658.	Heading Göttingen time, for 10 h. 00 m. read 19 h. 00 m.			
	31st, at 0 h. 00 m.....	for	634.8 read	534.8
	31st, mean.....	for	532.6 read	531.3
2659.	14th, at 12 h. 02 m.....	for	1268.2 read	1264.6
	12th, at 16 h. 02 m.....	for	1277.8 read	1279.8
2660.	28th, at 21 h. 02 m.....	for	1276.7 read	1266.7
	Mean at 21 h. 02 m.....	for	1247.1 read	1246.8
	Reduced mean at 21 h. 02 m.....	for	1188.9 read	1188.6
	Mean at 22 h. 02 m.....	for	1248.8 read	1248.4
	Reduced mean at 22 h. 02 m.....	for	1188.6 read	1188.2
	28th, mean.....	for	1274.4 read	1274.0
	28th, reduced mean.....	for	1203.8 read	1203.4
2666.	27th, at 23 h. 04 m.....	for	74.5 read	75.5
2668.	Mean, at 6 h. 00 m.....	for	531.5 read	531.1
2669.	3d, at 18 h. 00 m.....	for	529.7 read	519.7
	Mean, at 18 h. 00 m.....	for	521.7 read	521.3
	3d, mean.....	for	529.4 read	529.0
2670.	7th, at 12 h. 02 m.....	for	1248.4 read	1258.4
	Mean at 12 h. 02 m.....	for	1275.1 read	1275.5
	Reduced mean at 12 h. 02 m.....	for	1208.6 read	1209.0
	7th, at 16 h. 02 m.....	for	1285.6 read	1288.6
	24th, at 16 h. 02 m.....	for	1299.1 read	1299.1, 2 m. late
	Reduced mean at 16 h. 02 m.....	for	1237.9 read	1235.9
	Mean at 17 h. 02 m.....	for	1304.9 read	1304.7
	Reduced mean at 17 h. 02 m.....	for	1235.2 read	1234.0
2671.	Mean at 21 h. 02 m.....	for	1287.3 read	1287.7
	Reduced mean at 21 h. 02 m.....	for	1212.1 read	1211.5
	Mean at 22 h. 02 m.....	for	1287.4 read	1287.9
	Reduced mean at 22 h. 02 m.....	for	1209.9 read	1210.4
	7th, mean.....	for	1280.3 read	1280.7
	7th, reduced mean.....	for	1209.1 read	1209.5
2675.	Mean at 22 h. 04 m.....	for	828.3 read	827.9
	Reduced mean at 22 h. 04 m.....	for	224.9 read	224.5
2682.	At 5 h. 20 m.....	for	1313.3 read	1213.3
2691.	At 0 h. 38 m.....	for	1166.3 read	1266.3
	At 0 h. 44 m.....	for	1164.5 read	1264.5
	At 16 h. 26 m.....	for	1275.4 read	1276.4
2693.	At 16 h. 54 m.....	for	513.8 read	518.8
2695.	At 10 h. 10 m.....	for	598.8 read	597.8
2702.	Mean at 7 h. 30 m.....	for	551.4 read	531.4
2704.	9th at 2 h. 12 m.....	for	506.4 read	516.4
	Mean at 2 h. 12 m.....	for	533.1 read	533.5
2711.	Heading of page, for Maximum read Minimum.			
2717.	11th, at 14 h. 04 m.....	for	742.8 read	732.8
	Mean at 14 h. 04 m.....	for	715.5 read	715.1
	Reduced mean at 14 h. 04 m.....	for	313.2 read	312.8
2748.	11th at 22 h. 04 m.....	for	688. read	688.6
2775.	14th at 12 h. 02 m.....	for	1268.2 read	1264.6
	Mean at 12 h. 02 m.....	for	1132.7 read	1232.7
2780.	12th at 16 h. 02 m.....	for	1277.8 read	1279.8
2788.	Mean at 18 h. 00 m.....	for	521.7 read	521.3
2796.	Mean at 2 h. 02 m.....	for	1298.4 read	1298.0
2801.	14th at 13 h. 04 m.....	for	852.7 read	851.7
2802.	Reduced mean at 13 h. 40 m.....	for	247.5 read	246.4
	Reduced mean at 13 h. 46 m.....	for	246.1 read	245.2
	Reduced mean at 13 h. 52 m.....	for	244.8 read	244.1
	Reduced mean at 13 h. 58 m.....	for	243.5 read	243.0
	Reduced mean at 14 h. 04 m.....	for	243.4 read	242.0

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Page 2802.	Reduced mean at 14 h. 10 m.....for	243.6 read	241.5
	Reduced mean at 14 h. 16 m.....for	243.9 read	241.1
	Reduced mean at 14 h. 22 m.....for	242.8 read	240.6
2993.	2d, phases of the moon insert ☾.		
	8th, phases of the moon insert ○.		
	15th, phases of the moon insert ☾.		
	23d, phases of the moon insert ●.		
	31st, phases of the moon insert ☾.		
2998.	19th November.....for	563.9 read	559.7
	29th November.....for	563.9 read	561.4
3019.	23d, barometer, reduced.....for	33.007 read	30.007
3028.	At 6 h. 15 m., barometer, reduced.....for	29.971 read	29.974
	At 10 h. 15 m., barometer, reduced.....for	29.970 read	29.978
3033.	Barometer, reduced, 10 h. 15 m., "Oct., Nov., and Dec." for	29.946 read	29.948
3037.	6th January.....for	559.8 read	559.0
	7th January.....for	568.1 read	567.3
	18th January.....for	566.7 read	567.8
3040.	10th December.....for	254. read	252.6
3042.	31st August.....for	616.9 read	616.0
3043.	Vertical force, 13 h. 58 m., May.....for	179.2 read	176.4
	Horizontal force, 12 h. 02 m. June.....for	553.4 read	554.1
	Horizontal force, 16 h. 02 m. June.....for	575.5 read	576.6
3044.	Declination, 2 h., August.....for	564.5 read	564.9
	Declination, 18 h., September.....for	558.2 read	557.7
	Declination, 2 h., December.....for	562.5 read	563.5
	Vertical force, 23 h. 58 m., August.....for	174.4 read	184.4
	Vertical force, 13 h. 58 m., October.....for	220.2 read	217.7
	Vertical force, 13 h. 58 m. December.....for	267.5 read	267.8
	Vertical force, 15 h. 58 m., December.....for	262.4 read	265.1
	Vertical force, 23 h. 58 m., December.....for	259.3 read	258.3
	Horizontal force, 12 h. 02 m., August.....for	602.6 read	602.2
	Horizontal force, 22 h. 02 m., October.....for	683.5 read	681.5
	Horizontal force, 16 h. 02 m., December.....for	725.5 read	721.9
3045.	Declination 2 h., "Oct., Nov., and Dec.".....for	565.2 read	565.5
	Vertical force, 13 h. 58 m., "April, May, and June.".....for	183.8 read	182.9
	Vertical force, 23 h. 58 m., "July, Aug., and Sept.".....for	178.2 read	181.5
	Vertical force, 13 h. 58 m., "Oct., Nov., and Dec.".....for	246.8 read	246.0
	Vertical force, 15 h. 58 m., "Oct., Nov., and Dec.".....for	247.5 read	248.4
	Vertical force, 23 h. 58 m., "Oct., Nov., and Dec.".....for	248.7 read	248.4
	Vertical force, 13 h. 58 m., "Jan. to June.".....for	200.4 read	200.0
	Vertical force, 13 h. 58 m., "July to Dec.".....for	221. read	220.6
	Vertical force, 15 h. 58 m., "July to Dec.".....for	216.2 read	216.6
	Vertical force, 23 h. 58 m., "July to Dec.".....for	213.4 read	214.9
	Vertical force, 13 h. 58 m., 1842.....for	210.7 read	210.3
	Vertical force, 23 h. 58 m., 1842.....for	207.3 read	208.0
	Horizontal force, 12 h. 02 m., "April, May, and June.".....for	527.9 read	528.2
	Horizontal force, 16 h. 02 m., "April, May, and June.".....for	551.3 read	551.7
	Horizontal force, 16 h. 02 m., "Oct., Nov., and Dec.".....for	710.1 read	708.9
	Horizontal force, 22 h. 02 m., "Oct., Nov., and Dec.".....for	697.8 read	697.1
	Horizontal force, 12 h. 02 m., "Jan. to June.".....for	803.6 read	803.8
	Horizontal force, 16 h. 02 m., "July to Dec.".....for	672.7 read	672.1
	Horizontal force, 22 h. 02 m., "July to Dec.".....for	648.4 read	648.1
	Horizontal force, 16 h. 02 m., 1842.....for	598.4 read	598.0
	Horizontal force, 22 h. 02 m., 1842.....for	575.8 read	575.6
3077.	Barometer, reduced, 23h., "July, Aug., and Sept.".....for	29.799 read	29.979
3083.	August previos to 10th subtract .7.		
3087.	Declination, 18h., August.....for	551. read	550.8
3089.	20h., "July to December.".....for	554.2 read	552.3
	20h. 1843.....for	555.1 read	554.2
3092.	Declination, August.....for	561.5 read	561.3
3128.	4th line from the top.....for	.000,040 read	.000,036.5
3136.	2h, August.....for	549.2 read	548.8
3138.	21 h. 02 m., August.....for	1046.6 read	1046.6
3139.	23 h. 04 m., January.....for	294.6 read	295.7
	23 h. 04 m., May.....for	269.6 read	270.9
3141.	2 h., "July, Aug., and Sept.".....for	547.4 read	547.2

Page 3142.	21 h. 02 m., " July, August, and Sept.".....for	1035.6 read	1035.
	21 h. 02 m., " July to December.".....for	1065.7 read	1065.
3143.	23 h. 04 m., " Jan., Feb., and March.".....for	289.9 read	290.
	22 h. 04 m., " Apr., May, and June.".....for	273.5 read	273.
	23 h. 04 m., " Jan. to June.".....for	282.8 read	283.
3144.	Declination, January.....for	558.3 read	558.
	Declination, " Jan., Feb., and March.".....for	558.2 read	558.
	Declination, " Jan. to June.".....for	554. read	553.9
3157.	5th, barometer, reduced.....for	30.017 read	30.009
3175.	20h., " July to Dec.".....for	29.904 read	29.906
	21 h., " July to Dec.".....for	29.909 read	29.913
	21 h., 1844.....for	29.936 read	29.938
3192.	23 h. 04 m., January.....for	312.6 read	311.2
3193.	Vertical force, 23 h., 04 m., " Jan., Feb., and March"....for	308.2 read	307.8
	Vertical force, 23 h., 04 m., " Jan. to June.".....for	274.2 read	274.0
3197.	25th, barometer, reduced.....for	29.848 read	29.348
3212.	" Apr., May, and June," barometer, reduced.....for	30.908 read	29.908

NOTES AND CORRECTIONS TO PLATES.

Where both the Göttingen and Observatory times are found on the plates, the former is referred to in this list.

Plate	I-VII. These curves have been reduced to the general series by the corrections found on pages 2978 and 2996.		
	IX. August 31st, barometer.....for	29.961 read	29.861
	XI. December 4th, barometer.....for	30.295 read	30.395
	December 26th, force of vapor.....for	.073 read	.173
	XII. June, 6 h. 6 m., barometer.....for	29.878 read	29.884
	June, 14 h. 6 m., force of vapor.....for	.521 read	.531
	July, 0 h. 6 m., barometer.....for	29.935 read	29.929
	July, 2 h. 6 m., barometer.....for	29.943 read	29.941
	July, 4 h. 6 m., barometer.....for	29.974 read	29.948
	July, 4 h. 6 m., force of vapor.....for	.607 read	.616
	For 25' past the Göttingen hours, read 6', &c.		
	For 5' past the Observatory hours, read 25', &c.		
	XIII. For 25' past the Göttingen hours, read 6', &c.		
	For 5' past the Observatory hours, read 25', &c.		
	XV. June 25th.....for	570. read	568.7
	June 26th.....for	575.7 read	567.3
	Cancel curve for January.		
	XVI. November 19th.....for	563.9 read	559.7
	November 29th.....for	563.9 read	561.4
	XVII. February 13th.....for	490.4 read	497.4
	February 15th.....for	497.1 read	502.3
	To reduce these curves to the general series subtract 529.		
	XVIII. July 22d.....for	204.9 read	199.7
	XIX. February 1st.....for	942.4 read	1058.4
	February 2d.....for	921.6 read	1037.6
	February 3d.....for	912.4 read	1028.4
	February 4th.....for	913.7 read	1029.7
	February 5th.....for	919.7 read	1035.7
	February 6th.....for	911.7 read	1024.5
	February 8th.....for	1041.2 read	1072.8
	February 22d.....for	1053.9 read	1035.5
	To reduce these curves to the general series, subtract from January 691.2, from February 807.2, and from the others 900.		
	XXI. November, 10 h. 00 m.....for	559.4 read	558.2
	November, 12 h. 00 m.....for	557.7 read	555.8
	XXII. February, at 11 h. 57½ m.....for	486.3 read	489.0
	February, at 21 h. 57½ m.....for	455.9 read	462.0
	December, at 23 h. 57½ m.....for	171.4 read	167.4
	To reduce the curves previous to July, on this plate, to the general series, subtract 559.		
	Hours at Göttingen.....for 6 h. 2½ m. read	6 h. 00 m.	
	Hours at Göttingen.....for 4 h. 2½ m. read	4 h. 00 m.	
	XXIII. February, at 22 h. 02½ m.....for	1023.5 read	1017.2
	February, at 0 h. 02½ m.....for	1035. read	1021.3
	February, at 2 h. 02½ m.....for	1040.2 read	1026.9
	February, at 4 h. 02½ m.....for	1029.8 read	1017.9
	To reduce the curves of the first six months to the general series, subtract from January 691.2, from February 793.8, and from the four other curves 900.		

MAGNETIC OBSERVATORY,

AT THE

GIRARD COLLEGE, PHILADELPHIA.

ORDINARY MAGNETIC AND TRIPLE OBSERVATIONS,

FROM JUNE TO DECEMBER, 1840.

GENERAL NOTES.

The times of observation are arranged according to civil reckoning at Philadelphia, the hours being written from 0 to 24, for convenience. The corresponding Göttingen time is written above the observatory time.

The declination magnetometers are of Gauss's pattern, and made by Meyerstein, of Göttingen. The unit of the scale of the subsidiary instrument is $20''.7$, and of the observatory instrument $27''.3$. The results with the subsidiary instrument are reduced to equivalent readings of the observatory declinometer. Increase of reading corresponds to decrease of declination.

The vertical force instrument is Lloyd's pattern, and made by Robinson, of London. The change of force represented by each division of the micrometer screw is .000,016.5; this supposes the instrument to be in the observatory, but serves approximately for its position in the college building. The correction for temperature is 3.12 divisions for 1° Fahrenheit. Increase of reading while in the college building corresponds to decrease of force; when in the observatory, to increase of force.

The horizontal force magnetometer is one of Gauss's large bifilar instruments. The change of force for each division of the scale is .000,040 of the whole horizontal force. This supposes all the instruments in their place in the observatory, but is nearly correct under all the circumstances of observation. Increase of reading corresponds to decrease of force. The correction for temperature at the beginning of the year was 3.2 divisions for 1° Fahrenheit; at the beginning of 1841, 2.9 divisions; and the corrections are applied accordingly. The thermometers of both the force instruments are divided to half degrees, and read to tenths.

The three magnetometers were arranged according to the method of Professor Lloyd, so as to produce an equilibrium in the action upon the declinometer.

The triple observations are uncorrected for temperature. When changes are made in the instruments, they are noted. The words *as before* indicate that no change has been made since the preceding month.

[1840.]

DECLINATION MAGNETOMETER.

June.]	A. m.														Reduced to observatory readings.
	0 00	0 10	0 20	0 30	0 40	0 50	1 00	1 10	1 20	1 30	1 40	1 50	2 00	2 10	
Greenwich time.	0 00	0 10	0 20	0 30	0 40	0 50	1 00	1 10	1 20	1 30	1 40	1 50	2 00	2 10	
Observatory time.	0 194	0 194	0 194	0 194	0 194	0 194	0 194	0 194	0 194	0 194	0 194	0 194	0 194	0 194	
June 1.	640.2	641.7	643.6	645.6	647.6	649.6	651.6	653.6	655.6	657.6	659.6	661.6	663.6	665.6	493.2
2.	634.	636.3	638.9	641.9	645.7	649.5	653.3	657.1	660.9	664.7	668.5	672.3	676.1	679.9	496.7
3.	634.	636.1	638.9	641.9	645.7	649.5	653.3	657.1	660.9	664.7	668.5	672.3	676.1	679.9	497.6
4.	635.8	638.1	640.3	642.5	644.7	646.9	649.1	651.3	653.5	655.7	657.9	660.1	662.3	664.5	498.3
5.	635.8	638.1	640.3	642.5	644.7	646.9	649.1	651.3	653.5	655.7	657.9	660.1	662.3	664.5	498.3
6.	638.4	640.3	641.8	643.5	645.2	646.9	648.6	650.3	652.0	653.7	655.4	657.1	658.8	660.5	498.6
7.	638.4	640.3	641.8	643.5	645.2	646.9	648.6	650.3	652.0	653.7	655.4	657.1	658.8	660.5	498.6
8.	640.	640.3	641.8	643.5	645.2	646.9	648.6	650.3	652.0	653.7	655.4	657.1	658.8	660.5	498.6
9.	643.9	647.	649.6	651.8	653.6	655.4	657.2	659.0	660.8	662.6	664.4	666.2	668.0	669.8	498.7
10.	644.1	647.	649.6	651.8	653.6	655.4	657.2	659.0	660.8	662.6	664.4	666.2	668.0	669.8	498.7
11.	639.	644.9	646.1	648.1	649.6	651.3	653.0	654.7	656.4	658.1	659.8	661.5	663.2	664.9	498.7
12.	643.3	643.1	646.1	648.1	649.6	651.3	653.0	654.7	656.4	658.1	659.8	661.5	663.2	664.9	498.7
13.	643.2	643.4	644.1	646.1	648.1	649.6	651.3	653.0	654.7	656.4	658.1	659.8	661.5	663.2	498.7
14.	641.	643.3	645.4	647.5	649.6	651.7	653.8	655.9	658.0	660.1	662.2	664.3	666.4	668.5	498.7
15.	641.	643.3	645.4	647.5	649.6	651.7	653.8	655.9	658.0	660.1	662.2	664.3	666.4	668.5	498.7
16.	641.9	643.5	644.8	646.8	648.7	650.7	652.7	654.7	656.7	658.7	660.7	662.7	664.7	666.7	498.7
17.	644.4	643.8	649.	646.5	648.5	650.5	652.5	654.5	656.5	658.5	660.5	662.5	664.5	666.5	498.7
18.	639.6	632.	643.4	645.5	647.5	649.5	651.5	653.5	655.5	657.5	659.5	661.5	663.5	665.5	498.7
19.	634.7	643.4	645.5	647.5	649.5	651.5	653.5	655.5	657.5	659.5	661.5	663.5	665.5	667.5	498.7
20.	647.3	645.	645.5	648.4	650.4	652.4	654.4	656.4	658.4	660.4	662.4	664.4	666.4	668.4	498.7
21.	640.2	643.3	643.4	645.7	647.7	649.7	651.7	653.7	655.7	657.7	659.7	661.7	663.7	665.7	498.7
22.	640.4	641.6	645.7	647.7	649.7	651.7	653.7	655.7	657.7	659.7	661.7	663.7	665.7	667.7	498.7
23.	640.5	640.1	645.7	647.7	649.7	651.7	653.7	655.7	657.7	659.7	661.7	663.7	665.7	667.7	498.7
24.	640.5	647.1	649.9	652.5	654.9	657.3	659.7	662.1	664.5	666.9	669.3	671.7	674.1	676.5	498.7
25.	645.	647.1	649.9	652.5	654.9	657.3	659.7	662.1	664.5	666.9	669.3	671.7	674.1	676.5	498.7
26.	648.5	643.9	648.5	646.1	649.6	652.0	654.4	656.8	659.2	661.6	664.0	666.4	668.8	671.2	498.7
27.	643.5	638.1	635.3	646.8	648.8	650.8	652.8	654.8	656.8	658.8	660.8	662.8	664.8	666.8	498.7
28.	643.5	638.1	635.3	646.8	648.8	650.8	652.8	654.8	656.8	658.8	660.8	662.8	664.8	666.8	498.7
29.	643.5	638.1	635.3	646.8	648.8	650.8	652.8	654.8	656.8	658.8	660.8	662.8	664.8	666.8	498.7
30.	644.9	645.2	643.	646.9	648.9	650.9	652.9	654.9	656.9	658.9	660.9	662.9	664.9	666.9	498.7
Mean.	643.2	643.2	646.6	648.6	649.6	651.6	653.6	655.6	657.6	659.6	661.6	663.6	665.6	667.6	494.1
Reduced to obser- vatory readings.	494.9	495.7	498.4	498.4	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	494.1

Values of one division of the scale = 0' 345. Vertical hair over middle division of scale. Increasing readings correspond to decreasing westerly variations. The declinometer was in one of the college buildings, east from the observatory. To reduce the divisions to the corresponding ones in the observatory, subtract, at 638.5, 144.7 divisions.

1840.]

VERTICAL FORCE MAGNETOMETER.

[1840.]

[92]

Göttingen time... Observatory time	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.	Reduced to 32° F.
June 1.....	151.4	197.6	161.2	160.1	104.6	139.7	143.3	130.2	174.	217.3	263.6	211.1	170.3	28.3
2.....	275.7	210.2	217.8	188.6	208.9	167.9	121.9	141.1	84.7	85.6	78.7	92.5	190.3	27.1
3.....	148.9	191.8	181.5	120.1	152.1	170.8	232.8	186.5	161.9	155.6	156.6	180.4	164.	38.3
4.....	165.9	148.4	140.6	153.3	148.9	174.8	181.	161.8	139.6	142.2	160.3	149.3	164.6	30.4
5.....	146.5	146.2	139.9	145.3	164.9	173.8	173.1	190.3	212.6	256.3	256.3	235.1	187.1	60.4
6.....	179.	139.1	190.7	221.5	211.9	224.	258.4	258.8	301.2	279.3	344.3	278.9	247.3	114.7
7.....	233.7	169.4	100.7	64.8	92.7	109.8	125.2	134.7	137.5	145.8	132.6	113.1	139.2	5.9
8.....	114.9	146.6	73.3	96.3	73.4	119.1	167.8	228.4	132.9	214.7	241.1	173.9	147.6	24.7
9.....	200.2	154.2	175.9	88.6	148.1	200.3	198.7	224.9	153.	174.1	219.2	198.2	177.7	51.4
10.....	230.7	218.5	205.9	162.4	219.6	255.6	267.7	266.7	387.2	318.3	315.4	298.8	252.6	117.2
11.....	278.8	295.6	291.8	259.	262.7	353.1	365.5	347.6	390.	404.	437.9	436.7	342.7	197.
12.....	413.5	422.2	440.	407.3	421.1	439.2	440.4	439.7	452.1	461.3	467.3	445.2	440.	288.7
13.....	362.9	463.8	552.4	459.9	468.6	402.	391.5	363.3	348.2	341.5	270.8	277.7	391.9	245.9
14.....	315.5	270.8	275.	232.	227.8	226.5	261.2	179.7	194.4	242.2	213.6	364.4	249.4	110.9
15.....	337.2	262.9	246.2	199.2	219.9	258.9	352.6	253.9	210.5	296.7	208.6	212.3	240.7	101.8
16.....	363.9	384.6	217.6	244.6	254.3	266.7	306.9	270.5	288.8	240.2	264.5	237.8	277.	138.8
17.....	186.2	210.3	272.9	230.9	232.7	258.6	260.5	227.1	266.7	287.6	290.2	267.	256.9	124.3
18.....	269.3	254.1	265.7	248.3	209.6	251.7	254.	248.6	218.9	275.	249.1	248.6	246.6	122.3
19.....	372.7	256.6	209.5	261.8	333.2	372.7	400.1	417.1	438.9	440.4	407.6	392.7	383.6	247.3
20.....	393.1	398.5	396.5	393.2	395.6	400.5	380.	396.1	445.3	415.5	349.4	242.1	392.1	250.5
21.....	366.8	332.4	304.6	284.6	334.3	436.6	411.1	382.5	399.7	456.3	508.9	512.3	392.2	246.3
22.....	511.9	558.8	577.8	507.4	462.5	499.	490.5	488.1	521.1	538.8	512.1	514.	515.2	257.6
23.....	507.6	497.5	477.8	450.	490.4	511.	465.	390.2	416.4	345.1	350.4	382.6	435.3	286.8
24.....	369.8	394.1	456.7	331.1	364.2	389.9	390.8	370.7	370.7	415.1	398.1	374.1	382.2	242.1
25.....	435.9	476.7	408.7	437.7	444.9	471.3	483.8	471.4	567.3	552.6	530.6	508.7	478.3	337.9
26.....	496.8	514.	502.3	461.4	468.6	480.1	515.9	525.4	567.6	527.3	531.1	501.8	507.7	254.5
Means.....	200.7	307.1	239.	265.3	273.7	298.4	306.6	292.9	299.5	314.2	312.8	304.9	297.1	
Reduced to 32° F.	163.1	170.4	153.3	131.1	138.6	162.7	169.3	153.7	157.5	171.	171.8	165.4		159.1

Each division of the scale corresponds to .000,016 in force, nearly. Increase of number corresponds to decrease of force. Observations made in the college building before referred to.

Getting time..... Observatory time....	A. m. 5 57½ 0 17	A. m. 7 57½ 2 17	A. m. 9 57½ 4 17	A. m. 11 57½ 6 17	A. m. 13 57½ 8 17	A. m. 15 57½ 10 17	A. m. 17 57½ 12 17	A. m. 19 57½ 14 17	A. m. 21 57½ 16 17	A. m. 23 57½ 18 17	A. m. 1 57½ 20 17	A. m. 3 57½ 22 17	Means.
June 1.....	77.	76.5	76.5	76.	76.	76.3	77.3	78.	80.	80.	79.	78.	77.6
2.....	78.	77.	76.	75.	75.5	75.5	75.	74.7	73.	73.	73.	71.5	74.7
3.....	71.	72.	74.	72.	72.5	72.	72.7	72.7	72.	72.5	72.	72.	72.8
4.....	72.	72.	72.	71.7	71.8	72.	71.5	71.7	71.7	71.7	71.	72.5	71.8
5.....	72.	72.	72.	71.	71.5	70.5	71.5	72.3	74.5	75.	75.	73.5	73.6
6.....	72.7	73.	73.	72.	73.	74.	74.5	75.	76.5	76.5	76.5	76.5	74.5
7.....	72.	72.	70.	70.	70.	70.5	71.	72.	73.	74.	73.5	71.	71.5
8.....	70.3	70.5	69.5	69.5	70.	70.5	70.7	72.	73.	76.	73.	72.	71.4
9.....	72.	71.	70.	70.	71.3	72.3	72.5	74.	74.5	74.5	74.	74.	73.5
10.....	74.	74.	73.	73.	74.	74.	74.7	76.	78.	78.5	78.	78.	75.4
11.....	77.	77.	76.	76.	76.5	77.7	78.	79.	82.	83.	82.	81.	78.7
12.....	80.7	80.	80.5	80.	80.5	81.5	84.	84.	84.	84.5	83.	82.	83.1
13.....	81.	79.3	80.	79.	79.5	78.	79.	78.3	79.	78.	77.7	77.7	78.8
14.....	76.	76.2	76.	76.	76.3	76.	76.	75.7	77.6	77.	76.	77.5	76.4
15.....	77.	77.	76.8	76.5	76.7	76.	76.	76.	77.5	76.	77.5	76.5	76.5
16.....	78.	77.5	76.	76.	76.	76.	76.	76.	76.	76.	76.	76.	76.3
17.....	78.5	76.	76.	74.5	74.6	74.	74.	74.3	74.5	74.	74.	73.	74.5
18.....	72.	71.5	72.	71.	71.5	72.	72.5	73.7	72.7	76.	73.	73.	72.5
19.....	75.3	75.1	74.	74.	74.	74.3	75.7	76.	77.4	78.	77.7	77.	75.7
20.....	76.8	76.8	77.	76.5	76.	74.5	76.5	77.8	79.	80.	79.5	78.	77.4
21.....	77.	77.	77.	76.5	77.3	78.	78.	80.	82.	83.4	82.	82.	79.1
22.....	82.5	82.5	82.	81.	82.	82.	82.	82.5	84.	84.	84.	83.	82.5
23.....	82.	81.	80.5	80.	80.	79.3	79.	79.3	79.	78.5	79.	78.	79.6
24.....	77.	76.	76.	75.	76.	76.	76.7	78.	79.	78.	78.	77.5	76.9
25.....	78.	80.5	80.	80.	80.	80.	81.	82.	83.5	84.	83.5	83.	80.2
26.....	81.	80.5	80.	80.	80.	80.	81.	82.	83.	83.5	83.	81.5	81.1
27.....	77.	78.	78.	77.5	78.	79.5	80.	82.	83.	83.5	83.	81.5	80.2
28.....	81.	80.5	80.	80.	80.	80.	81.	82.	83.	83.5	83.	81.5	81.1
29.....	78.	78.	78.	77.5	78.	79.5	80.	82.	83.	83.5	83.	81.5	80.2
30.....	81.	80.5	80.	80.	80.	80.	81.	82.	83.	83.5	83.	81.5	81.1
Means.....	76.1	75.8	75.5	75.	75.3	75.5	76.	76.6	77.5	77.9	77.3	76.7	76.36

Degrees Fahrenheit. Correction for temperature, 3.13 divisions of the scale for each degree of Fahrenheit.

[1940.]

HORIZONTAL FORCE MAGNETOMETER.

JUNE.]

Göttingen time... Observatory time...	<i>h. m.</i> 6 02½ 0 22	<i>h. m.</i> 8 02½ 2 22	<i>h. m.</i> 10 02½ 4 22	<i>h. m.</i> 12 02½ 6 22	<i>h. m.</i> 14 02½ 8 22	<i>h. m.</i> 16 02½ 10 22	<i>h. m.</i> 18 02½ 12 22	<i>h. m.</i> 20 02½ 14 22	<i>h. m.</i> 22 02½ 16 22	<i>h. m.</i> 0 02½ 18 22	<i>h. m.</i> 2 02½ 20 22	<i>h. m.</i> 4 02½ 22 22	Means.	Reduced to 32° F.
June 1.....	589.5	596.3	580.2	584.4	575.7	592.3	586.7	608.4	595.7	602.2	625.9	607.3	600.9	460.4
2.....	603.6	597.4	581.8	564.5	557.6	588.8	581.2	517.5	507.7	523.2	547.8	526.8	554.8	450.8
3.....	593.4	594.9	530.4	534.4	551.1	585.7	556.1	543.2	551.2	548.9	545.1	560.6	547.1	441.5
4.....	551.5	551.	543.3	536.	544.2	579.1	554.	532.9	542.9	544.3	540.2	539.3	546.6	436.2
5.....	540.9	535.1	524.6	522.6	545.7	572.9	554.	565.6	570.2	576.4	579.8	577.9	555.5	424.5
6.....	577.8	561.3	556.8	555.7	570.	572.4	566.3	544.8	563.8	604.6	595.5	579.3	573.3	437.3
7.....	518.2	530.9	518.7	497.9	520.4	535.3	511.1	485.4	510.9	564.6	592.5	547.3	524.4	428.7
8.....	546.1	529.1	520.4	513.3	535.	533.1	525.1	532.6	542.4	577.2	571.7	573.2	540.8	428.8
9.....	593.3	569.5	547.2	531.9	552.1	574.1	573.1	567.8	590.1	596.5	601.1	609.4	573.	447.2
10.....	593.8	593.6	596.3	575.7	592.4	589.	571.4	571.4	593.7	628.4	619.1	633.4	598.2	459.
11.....	632.8	610.8	601.6	580.2	621.7	630.5	597.6	580.5	595.4	660.2	646.6	631.8	615.8	466.4
12.....	638.8	621.1	606.6	602.8	640.5	676.2	638.2	631.2	624.2	649.3	636.3	633.6	631.2	475.4
13.....	626.1	604.4	647.	628.6	619.2	632.8	645.9	609.6	582.6	619.4	620.	599.	619.5	435.
14.....	627.9	640.	611.9	584.5	610.	648.3	624.8	604.1	577.6	634.5	628.2	620.3	617.7	500.6
15.....	618.3	616.6	602.8	593.6	605.5	628.9	638.	609.8	608.3	621.8	636.9	634.7	617.8	493.
16.....	577.8	596.9	595.7	581.8	590.1	608.7	608.8	583.6	580.4	599.1	599.5	589.5	598.	480.6
17.....	615.2	592.8	591.1	571.2	578.4	630.9	624.5	573.6	529.9	600.2	586.1	611.7	586.7	473.7
18.....	636.8	625.5	626.	607.3	653.3	663.8	665.5	650.9	652.8	654.9	633.6	649.6	596.9	490.7
19.....	634.8	648.6	642.	626.3	643.2	651.	642.1	642.6	633.8	651.1	650.	660.3	645.6	504.5
20.....	649.7	652.9	635.7	631.8	648.7	657.3	642.8	632.1	657.1	666.4	685.6	671.3	660.1	506.7
21.....	632.7	647.1	638.4	630.6	649.3	677.2	675.5	680.7	663.6	674.9	676.2	671.2	662.3	510.3
22.....	652.7	649.4	650.2	640.9	628.7	659.4	634.5	592.3	575.9	645.8	698.1	607.8	620.6	491.5
23.....	604.8	651.5	646.4	618.9	638.5	669.1	669.6	666.4	658.	672.8	672.8	663.1	650.9	526.1
24.....	711.9	658.5	672.9	682.1	.....	705.2	719.4	703.5	676.8	705.3	705.4	714.7	694.2	539.
25.....	690.6	688.7	693.1	671.2	700.9	709.9	694.5	685.3	681.5	699.1	697.	693.1	692.1	537.8
Means.....	606.7	603.5	598.7	586.	599.1	623.6	612.4	593.8	593.8	615.2	620.	616.	605.77	
Reduced to 32° F.	481.9	482.9	481.9	469.2	480.1	499.3	481.8	457.5	453.	474.4	465.6	484.8		477.55

Each division of the scale corresponds to .000040, nearly, in force.

[1840.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

JUNE.]

	A. m. 6 03½ 0 30	A. m. 8 03½ 2 32	A. m. 10 03½ 4 23	A. m. 12 03½ 6 33	A. m. 14 03½ 8 33	A. m. 16 03½ 10 33	A. m. 18 03½ 12 33	A. m. 20 03½ 14 33	A. m. 22 03½ 16 33	A. m. 0 03½ 18 33	A. m. 2 03½ 20 33	A. m. 4 03½ 22 33	Means.
Göttingen time													
Observatory time													
June 1	74.7	73.1	71.6	71.5	72.6	74.9	77.6	80.8	83.5	80.8	75.8	74.	75.9
2	71.2	70.9	67.5	65.8	64.7	64.1	63.5	62.6	61.7	61.2	60.8	60.5	64.5
3	66.5	66.9	66.6	63.9	63.3	64.8	66.7	68.3	68.5	68.3	67.5	67.1	65.
4	66.7	66.3	66.	66.1	66.5	66.7	66.7	66.8	66.8	66.9	66.9	66.	66.5
5	65.5	65.2	64.7	65.7	67.	68.5	69.5	72.5	75.1	77.	73.9	72.9	69.8
6	71.3	69.7	68.6	68.2	70.7	73.5	76.7	77.5	80.1	79.7	78.5	76.9	74.2
7	59.3	58.	56.7	57.	58.2	59.8	62.	64.2	67.1	68.	66.3	65.8	61.9
8	64.2	62.7	61.1	61.5	63.2	65.2	68.2	71.2	72.3	73.2	70.6	70.1	67.
9	68.5	66.7	65.	65.	67.	69.2	73.	75.6	77.	76.4	74.9	74.1	71.
10	72.5	71.1	69.8	68.3	71.2	75.	77.7	79.	80.9	82.	79.	78.3	75.5
11	76.5	74.3	73.2	73.8	75.6	77.	79.8	81.8	84.	84.8	82.1	81.2	78.7
12	80.1	78.5	77.3	78.	79.5	81.1	83.1	83.9	84.5	84.2	80.1	80.1	80.7
13	72.8	71.9	70.8	70.	69.3	69.	70.2	71.9	72.8	73.2	70.2	69.7	70.9
14	67.3	65.9	63.8	64.2	65.7	67.1	68.5	70.5	73.	74.2	72.3	71.2	68.6
15	68.7	67.2	65.3	66.4	68.3	70.	73.	74.6	76.3	76.4	74.	72.4	71.
16 . . . . .	.....	67.8	67.1	67.2	67.5	68.5	70.9	70.	70.2	69.4	69.	68.5	69.7
17	67.4	67.2	65.8	65.2	66.3	67.5	68.	69.1	70.5	68.6	66.2	66.	67.3
18	64.8	63.6	63.6	61.9	62.2	64.	66.	67.2	67.3	68.5	67.7	66.5	66.2
19	71.8	70.5	69.	69.6	71.3	73.5	76.3	79.	80.7	80.9	79.6	77.9	75.
20	77.	75.4	73.9	72.	73.	73.1	75.2	77.5	79.6	81.	79.	77.	76.1
21	75.4	73.2	71.8	71.3	73.1	75.9	78.7	80.5	82.9	83.6	79.	76.3	76.8
22	75.5	74.4	73.5	74.4	76.8	79.5	82.	84.6	86.1	85.2	81.6	79.9	79.5
23	78.	76.7	75.	73.5	72.3	71.3	70.5	71.3	71.2	70.2	69.1	68.2	72.3
24	66.5	66.	65.6	.....	.....	69.	71.	74.	76.	75.	75.	74.	71.3
25	77.6	76.6	76.	75.7	.....	77.8	81.	83.5	84.	85.9	84.	83.5	80.5
26	80.8	79.	77.8	77.9	77.5	78.5	80.5	83.1	84.2	83.1	82.	81.	80.3
Means	71.	69.7	68.5	68.5	69.2	70.9	73.8	74.6	76.	76.	74.	73.	72.07

Degrees Fahrenheit. Correction for temperature, 2.3 divisions of the scale for each degree of Fahrenheit.

[97]

June.]

TRIPLE OBSERVATIONS.

[1840.]

[97]

8

Göttingen time..... Observatory time.....	Declination.			Vertical force.				Horizontal force.				Tempera- ture Fah- renheit.
	h. m. 13 53½ 2 12	h. m. 14 00 8 19½	h. m. 14 07½ 8 27	h. m. 13 50 8 09½	h. m. 13 57½ 8 17	h. m. 14 05 8 24½	Tempera- ture Fah- renheit.	h. m. 13 55 8 14½	h. m. 14 02½ 8 22	h. m. 14 10 8 29½		
June 1.....	658.1	658.8	659.2	107.7	104.6	102.1	76.	575.6	575.7	583.5	72.8	
2.....	652.2	652.	649.2	206.	208.9	214.8	75.5	568.4	557.6	561.3	64.7	
3.....	646.4	646.1	646.	162.9	153.1	157.3	73.5	549.	551.1	552.8	63.3	
4.....	651.6	649.8	649.8	150.5	148.9	149.4	71.8	542.7	544.2	554.5	66.5	
5.....	650.9	647.7	650.7	131.9	131.9	139.1	71.5	546.7	545.7	548.3	67.	
6.....	645.4	644.7	644.3	206.6	211.9	209.1	73.	568.8	570.	572.2	70.7	
7.....	657.6	657.8	657.	94.9	98.7	78.2	70.	518.	520.4	522.3	58.2	
8.....	647.3	645.	644.8	72.4	72.4	79.4	70.	585.	585.	585.4	63.2	
9.....	656.4	657.3	657.7	146.1	149.1	150.4	71.5	549.8	552.1	552.3	67.	
10.....	654.6	656.6	657.2	197.8	219.6	223.3	74.	593.5	592.4	592.7	71.2	
11.....	657.3	657.5	656.8	260.3	263.7	263.6	76.5	617.7	621.7	622.7	75.6	
12.....	655.6	655.2	654.8	421.7	421.1	417.1	80.5	634.7	640.5	642.4	79.5	
13.....	657.3	658.4	659.4	419.8	468.6	510.8	78.5	614.1	619.2	616.8	69.3	
14.....	650.6	652.3	652.6	249.4	227.8	231.5	76.3	601.	610.	611.2	65.7	
15.....	652.8	653.1	652.6	184.4	219.9	224.1	75.7	600.7	605.5	603.	68.3	
16.....	653.9	653.9	654.4	282.2	254.3	252.4	76.	605.3	605.4	608.2	67.5	
17.....	650.3	650.	649.7	233.	233.7	244.5	74.6	597.3	590.1	594.7	66.3	
18.....	659.4	660.5	660.6	207.8	209.6	216.6	71.5	578.4	580.1	580.2	62.5	
19.....	661.2	662.6	657.1	345.6	332.2	340.3	74.	647.3	653.3	654.8	71.3	
20.....	654.9	654.4	654.	393.8	395.6	371.7	76.2	642.2	643.2	644.2	72.	
21.....	644.9	644.7	643.2	341.6	334.3	341.9	77.3	645.5	646.7	649.	73.2	
22.....	647.8	647.8	647.8	.....	.....	.....	.....	643.7	649.3	651.8	76.7
23.....	649.	646.1	646.4	472.5	490.4	508.3	80.	638.9	638.7	630.5	72.3	
24.....	662.8	662.8	664.1	354.3	364.2	332.8	76.	639.8	638.5	640.4	67.	
25.....	657.	656.6	657.1	438.8	444.9	440.5	78.	.....	.....	.....	(?) 67.
26.....	646.9	646.9	646.1	472.2	468.6	468.8	80.	698.4	700.9	699.4	77.5	

[1840.]

DECLINATION MAGNETOMETER.

JULY.]

Göttingen time. Observatory time.	A. m.		A. m.		A. m.		A. m.		A. m.		A. m.		A. m.		A. m.		A. m.		A. m.		A. m.		Means.	Reduced to observatory readings.
	0 00	8 09	16 18	24 27	32 36	40 45	48 54	56 58	64 67	72 70	80 68	88 65	96 62	104 59	112 55	120 52	128 48	136 45	144 41	152 38	160 34	168 31		
July 1.....	649.2	645.0	641.5	637.7	633.3	628.4	623.4	618.4	613.4	608.4	603.4	598.4	593.4	588.4	583.4	578.4	573.4	568.4	563.4	558.4	553.4	548.4	543.4	538.4
2.....	648.3	644.1	640.6	636.8	632.4	627.5	622.5	617.5	612.5	607.5	602.5	597.5	592.5	587.5	582.5	577.5	572.5	567.5	562.5	557.5	552.5	547.5	542.5	537.5
3.....	647.4	643.2	639.7	635.9	631.5	626.6	621.6	616.6	611.6	606.6	601.6	596.6	591.6	586.6	581.6	576.6	571.6	566.6	561.6	556.6	551.6	546.6	541.6	536.6
4.....	646.5	642.3	638.8	635.0	630.6	625.7	620.7	615.7	610.7	605.7	600.7	595.7	590.7	585.7	580.7	575.7	570.7	565.7	560.7	555.7	550.7	545.7	540.7	535.7
5.....	645.6	641.4	637.9	634.1	629.7	624.8	619.8	614.8	609.8	604.8	599.8	594.8	589.8	584.8	579.8	574.8	569.8	564.8	559.8	554.8	549.8	544.8	539.8	534.8
6.....	644.7	640.5	637.0	633.2	628.8	623.9	618.9	613.9	608.9	603.9	598.9	593.9	588.9	583.9	578.9	573.9	568.9	563.9	558.9	553.9	548.9	543.9	538.9	533.9
7.....	643.8	639.6	636.1	632.3	627.9	623.0	618.0	613.0	608.0	603.0	598.0	593.0	588.0	583.0	578.0	573.0	568.0	563.0	558.0	553.0	548.0	543.0	538.0	533.0
8.....	642.9	638.7	635.2	631.4	627.0	622.1	617.1	612.1	607.1	602.1	597.1	592.1	587.1	582.1	577.1	572.1	567.1	562.1	557.1	552.1	547.1	542.1	537.1	532.1
9.....	642.0	637.8	634.3	630.5	626.1	621.2	616.2	611.2	606.2	601.2	596.2	591.2	586.2	581.2	576.2	571.2	566.2	561.2	556.2	551.2	546.2	541.2	536.2	531.2
10.....	641.1	636.9	633.4	629.6	625.2	620.3	615.3	610.3	605.3	600.3	595.3	590.3	585.3	580.3	575.3	570.3	565.3	560.3	555.3	550.3	545.3	540.3	535.3	530.3
11.....	640.2	636.0	632.5	628.7	624.3	619.4	614.4	609.4	604.4	599.4	594.4	589.4	584.4	579.4	574.4	569.4	564.4	559.4	554.4	549.4	544.4	539.4	534.4	529.4
12.....	639.3	635.1	631.6	627.8	623.4	618.5	613.5	608.5	603.5	598.5	593.5	588.5	583.5	578.5	573.5	568.5	563.5	558.5	553.5	548.5	543.5	538.5	533.5	528.5
13.....	638.4	634.2	630.7	626.9	622.5	617.6	612.6	607.6	602.6	597.6	592.6	587.6	582.6	577.6	572.6	567.6	562.6	557.6	552.6	547.6	542.6	537.6	532.6	527.6
14.....	637.5	633.3	629.8	626.0	621.6	616.7	611.7	606.7	601.7	596.7	591.7	586.7	581.7	576.7	571.7	566.7	561.7	556.7	551.7	546.7	541.7	536.7	531.7	526.7
15.....	636.6	632.4	628.9	625.1	620.7	615.8	610.8	605.8	600.8	595.8	590.8	585.8	580.8	575.8	570.8	565.8	560.8	555.8	550.8	545.8	540.8	535.8	530.8	525.8
16.....	635.7	631.5	628.0	624.2	619.8	614.9	609.9	604.9	599.9	594.9	589.9	584.9	579.9	574.9	569.9	564.9	559.9	554.9	549.9	544.9	539.9	534.9	529.9	524.9
17.....	634.8	630.6	627.1	623.3	618.9	614.0	609.0	604.0	599.0	594.0	589.0	584.0	579.0	574.0	569.0	564.0	559.0	554.0	549.0	544.0	539.0	534.0	529.0	524.0
18.....	633.9	629.7	626.2	622.4	618.0	613.1	608.1	603.1	598.1	593.1	588.1	583.1	578.1	573.1	568.1	563.1	558.1	553.1	548.1	543.1	538.1	533.1	528.1	523.1
Means.....	647.8	645.8	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9

Value of one division of the scale, 0'.345. Increasing readings correspond to decreasing declination. Instrument in college building, as before.

July 18.....	A. m.		A. m.		A. m.		A. m.		A. m.		A. m.		A. m.		A. m.		A. m.		A. m.		A. m.		Means.	Reduced to observatory readings.
	0 00	8 09	16 18	24 27	32 36	40 45	48 54	56 58	64 67	72 70	80 68	88 65	96 62	104 59	112 55	120 52	128 48	136 45	144 41	152 38	160 34	168 31		
20.....	518.3	521.2	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4
21.....	495.3	494.3	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1	496.1
22.....	496.3	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6	498.6
23.....	508.2	515.5	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2
24.....	500.1	506.1	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9
25.....	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4	496.4
26.....	498.1	495.3	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4	498.4
27.....	497.6	498.8	494.3	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5	498.5
28.....	494.7	503.9	502.2	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1	508.1
29.....	495.5	495.4	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5	497.5
30.....	497.6	503.2	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1
31.....	499.3	502.4	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5
Means.....	499.3	502.4	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5
Reduced means.....	499.4	497.8	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5
General do. for mo.....	499.4	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5

Instrument in observatory. Val. of 1 div. of scale 0'.482. Increasing readings correspond to decreasing declination. For reduction, subtract 44.7 from Nos. observed with the subsidiary at 888.9.

[1840.

VERTICAL FORCE MAGNETOMETER.

JULY.]

Göttingen time. Observatory time	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.	Reduced to 32° F.
July 1.....	516.9	538.5	533.4	482.4	453.5	487.	475.5	479.7	459.8	469.4	439.5	417.3	479.4	332.2
2.....	424.7	435.5	397.6	390.7	403.6	428.2	411.4	397.8	393.3	381.6	389.7	401.5	404.6	267.6
3.....	416.6	396.5	371.1	348.3	343.4	445.7	402.5	327.2	339.4	331.5	309.5	369.1	363.1	238.6
4.....	320.7	306.5	287.2	389.8	317.6	373.1	358.5	338.9	353.6	349.2	348.1	337.7	331.6	198.4
5.....	509.1	708.	.....	399.6	345.6	311.2	298.8	331.4	281.9	324.4	240.6	257.2	352.5	218.3
6.....	276.1	265.	298.7	293.4	274.9	286.5	275.1	275.1	270.8	322.7	305.4	292.5	288.2	159.7
7.....	313.7	267.2	279.4	258.8	463.6	370.8	299.4	317.4	286.7	369.1	264.6	264.	300.4	170.3
8.....	280.4	284.3	332.1	325.1	409.8	433.9	378.6	382.9	316.9	360.	310.3	385.5	347.1	213.9
9.....	426.2	386.1	354.3	305.	381.1	424.1	427.9	362.3	407.1	441.2	429.5	442.4	398.8	261.8
10.....	428.9	438.7	401.7	442.2	510.7	500.5	476.4	476.1	493.3	462.1	442.1	484.1	457.7	312.
11.....	502.8	535.	505.7	458.4	555.4	603.	621.8	525.7	470.8	492.7	525.	514.3	525.9	375.5
12.....	477.3	494.4	478.6	589.9	552.4	570.6	575.8	602.7	567.	694.2	572.8	589.9	558.8	402.3
13.....	564.1	536.5	522.2	494.8	502.7	555.9	566.3	617.7	659.7	723.7	625.1	621.7	582.5	423.7
14.....	600.1	608.5	587.1	573.1	603.	686.8	663.	657.7	668.2	710.5	636.9	610.4	638.7	470.3
15.....	606.4	712.1	720.9	738.3	719.6	644.2	542.4	511.6	503.8	572.6	579.6	535.9	616.6	451.5
16.....	585.1	720.8	802.4	835.	727.2	677.1	545.4	512.6	.....	.....	.....	.....	673.2	511.9
Means.....	451.7	479.2	458.3	451.5	472.8	497.5	457.4	444.8	423.1	449.6	427.7	426.7	453.02	.....
Reduced to 32° F.	307.6	336.3	316.2	311.4	330.5	344.	313.	297.9	273.9	300.5	281.1	284.	.....	308.56

Unit of force, 1000,016.5. Increase of number corresponds to decrease of force. Observations made in the college building.

1840.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

JULY.]

Göttingen time... Observatory time.	h. m. 5 57½ 0 17	h. m. 7 57½ 3 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.
July 1.....	81.5	80.	79.5	79.5	79.	78.7	78.7	78.7	80.	80.	78.	76.5	79.2
2.....	78.5	76.5	75.	75.	75.5	76.5	76.	76.5	76.	76.	76.5	76.	75.9
3.....	76.	75.5	74.	74.	74.5	75.	75.	75.	77.5	77.	76.5	73.5	75.1
4.....	73.5	72.5	73.	73.	74.	74.	75.	76.	77.	77.	76.	76.	74.7
5.....	74.5	75.	74.	74.	76.	76.5	76.5	76.5	74.5	74.	74.	73.5	75.
6.....	73.	72.5	72.5	72.5	73.	73.	73.	74.	74.	74.5	74.	73.5	73.2
7.....	73.5	73.	72.5	72.5	74.	74.	74.	74.	74.5	74.	74.	74.	73.7
8.....	74.	74.	73.5	73.5	75.	75.	75.	76.	76.5	76.	76.5	75.5	74.9
9.....	76.5	75.5	75.	75.	75.	76.	76.	77.	79.	80.	79.5	78.7	75.9
10.....	78.	77.5	77.	77.	77.	78.	78.	79.	81.	81.5	81.5	80.	78.7
11.....	81.	80.	79.	79.	80.	81.	81.	81.	81.	80.2	81.	79.5	80.2
12.....	81.	81.	80.	80.	81.	82.	82.	83.	84.	84.5	84.5	83.5	83.2
13.....	82.	81.	80.	80.	81.	82.	82.	84.	86.	87.	86.5	85.5	83.9
14.....	83.	82.	81.5	81.5	82.	83.	84.	87.	87.	88.5	86.	85.5	84.4
15.....	85.	84.	83.	83.	84.	85.5	85.5	85.5	87.	87.	86.5	84.2	84.6
16.....	84.	84.	83.	83.	84.5	84.	83.	83.	87.	87.	86.5	84.2	83.7
17.....													
18.....													
Means.....	78.2	77.3	77.5	76.9	77.6	78.	78.3	76.1	79.7	79.8	79.	78.4	78.30

Correction for temperature as before.

Göttingen time...	<i>h. m.</i> 5 57½	<i>h. m.</i> 7 57½	<i>h. m.</i> 9 57½	<i>h. m.</i> 11 57½	<i>h. m.</i> 13 57½	<i>h. m.</i> 15 57½	<i>h. m.</i> 17 57½	<i>h. m.</i> 19 57½	<i>h. m.</i> 21 57½	<i>h. m.</i> 23 57½	<i>h. m.</i> 1 57½	<i>h. m.</i> 3 57½	Means.	Reduced to 32° F.
Observatory time	0 17	2 17	4 17	6 17	8 17	10 17	12 17	14 17	16 17	18 17	20 17	22 17		
July 18*														
20.....	-460.8	-474.	-375.2	-389.	-486.5	-486.7	-458.9	-482.3	-487.2	-83.9	-100.9	-95.9	-365.5	-230.4
21.....	13.9	51.8	92.4	120.5	55.7	-31.6	-132.9	-139.4	-173.5	-32.9	-16.3	-9.1	-16.8	114.9
22.....	99.3	86.1	83.1	177.9	134.9	57.	-128.9	-148.1	†	-229.	-256.6	-342.4	-42.4	95.5
23.....	-313.	-354.5	-32.2	86.9	130.6	14.8	-92.5	-118.3	-38.6	5.8	32.4	83.8	-50.4	95.9
24.....	160.6	88.1	6.9	57.5	43.8	-39.1	-80.1	-65.1	-92.8	-108.4	-108.7	-68.9	-17.2	119.8
25.....	-17.1	-15.1	31.3	66.5	11.8	34.	-22.2	-62.7	-176.5	-120.9	-126.2	-117.6	-42.9	94.1
27.....	-86.3	-27.2	58.9	49.9	-27.6	-14.8	-131.7	-186.2	-231.7	-304.5	-249.8	-191.6	-111.8	30.5
28.....	-173.8	-77.2	-81.3	-6.4	-89.5	-83.2	-231.9	-156.5	-85.	-34.5	-32.3	16.2	-86.3	61.9
29.....	-3.1	13.4	-6.7	78.4	2.5	-87.2	-164.2	-126.4	-156.6	-78.	28.8	-228.3	-60.8	95.5
30.....	-44.	39.3	130.3	-72.2	40.7	-28.2	-70.3	-63.1	-93.2	-98.	-67.2	-145.4	-39.3	106.7
31.....	-50.8	-2.9	53.4	85.	102.7	59.5	47.	14.9	-9.6	23.1	2.5	109.2	36.2	179.7
Means.....	-79.6	-61.1	-3.6	23.2	-8.3	-56.	-132.9	-139.3	-154.5	-96.5	-81.4	-90.	-72.7	.....
Reduced to 32° F.	62.7	77.8	131.5	156.4	126.5	81.6	8.4	5.8	-5.4	-53.9	68.	57.2	.....	69.3

Unit of force, .000,016.5. Increase of reading corresponds to increase of force. Magnetometer in the observatory.

* The four observations taken on the 18th, at the observatory, have been thrown out, as they appeared doubtful.

† The instrument was placed in the observatory, with the declination and horizontal force instruments, on the 18th. From the 22d, at 18h. 17m., to September 12, inclusive, the observed numbers have been corrected for errors occasioned by moving the fixed hair in the right-hand microscope.

‡ 25m. 17s. *lat.*

[1840.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

July.]

	A. m. 5 57½ 0 17	A. m. 7 57½ 2 17	A. m. 9 57½ 4 17	A. m. 11 57½ 6 17	A. m. 13 57½ 8 17	A. m. 15 57½ 10 17	A. m. 17 57½ 12 17	A. m. 19 57½ 14 17	A. m. 21 57½ 16 17	A. m. 23 57½ 18 17	A. m. 1 57½ 20 17	A. m. 3 57½ 22 17	Means.
Göttingen time...													
Observatory time.													
July 20.....	76.	76.	76.	76.	73.	75.	75.	75.	75.5	76.	75.5	76.	75.3
21.....	74.	72.	70.	69.5	73.	73.	74.2	76.	78.2	78.5	77.5	74.5	74.2
22.....	73.8	71.8	70.8	71.	72.5	73.8	77.	79.	...	82.	83.5	83.7	76.2
23.....	86.	83.	79.5	77.5	78.5	80.	78.	78.	77.6	76.2	76.2	75.9	78.9
24.....	75.	74.5	74.	74.	76.	75.7	75.8	77.5	78.	77.9	77.3	76.4	75.9
25.....	75.5	74.2	72.8	72.3	73.2	73.8	74.8	76.4	79.2	80.	79.5	79.	75.9
26.....	76.8	75.6	74.6	73.8	74.	74.5	77.7	79.	81.5	82.2	81.3	80.4	77.6
27.....	78.	78.4	77.4	76.5	76.3	76.8	79.	80.	82.5	83.8	84.3	82.5	79.5
28.....	81.5	81.	80.5	80.	80.	80.6	81.4	82.6	84.	84.7	83.5	85.8	82.1
29.....	78.8	77.	75.2	75.	75.5	77.	79.2	81.	82.5	82.2	82.	80.	78.8
30.....	78.8	78.	77.	77.5	76.	76.7	78.2	79.2	79.5	78.7	78.5	78.2	78.
31.....													
Means.....	77.6	76.5	75.3	74.7	75.2	76.1	77.3	78.5	79.8	80.2	79.9	79.2	77.51

Correction for temperature as before.

[1840.]

HORIZONTAL FORCE MAGNETOMETER.

July.]

Göttingen time. Observatory time.	<i>h. m.</i> 6 02½ 0 22	<i>h. m.</i> 8 02½ 2 22	<i>h. m.</i> 10 02½ 4 22	<i>h. m.</i> 12 02½ 6 22	<i>h. m.</i> 14 02½ 8 22	<i>h. m.</i> 16 02½ 10 22	<i>h. m.</i> 18 02½ 12 22	<i>h. m.</i> 20 02½ 14 22	<i>h. m.</i> 22 02½ 16 22	<i>h. m.</i> 0 02½ 18 22	<i>h. m.</i> 2 02½ 20 22	<i>h. m.</i> 4 02½ 22 22	Means.	Reduced to 32° F.
July 1.....	687.6	875.5	605.8	655.4	672.2	692.1	671.7	683.5	656.5	662.1	657.9	656.6	687.2	539.9
2.....	647.7	646.6	643.	631.3	656.6	668.9	667.4	605.	645.8	641.3	645.6	641.9	643.4	524.4
3.....	686.2	639.4	619.4	618.8	634.6	668.7	664.2	639.5	606.9	634.2	635.2	624.7	632.5	522.1
4.....	626.6	613.	614.9	606.8	631.3	705.3	697.1	639.9	638.2	704.8	616.5	810.	675.5	556.5
6.....	872.3	868.8	838.6	806.4	866.1	822.5	807.7	765.	726.4	773.9	786.1	784.6	809.9	688.
7.....	765.6	742.8	761.1	749.	768.5	791.9	798.3	709.	752.4	753.7	767.	769.	759.7	641.9
8.....	770.2	758.3	752.6	756.9	778.2	803.2	785.1	761.4	747.7	774.3	771.3	774.1	767.	643.2
9.....	764.8	762.5	768.	776.1	812.3	822.	786.1	776.2	747.3	771.4	743.4	794.6	777.2	641.8
10.....	780.8	790.7	768.3	761.5	768.5	810.9	747.4	732.7	731.8	800.5	783.2	785.4	775.1	636.9
11.....	816.9	787.	786.6	791.5	836.6	837.3	796.6	791.4	772.7	841.6	812.7	796.5	805.1	658.9
13.....	794.1	796.5	813.6	811.8	831.	841.9	789.2	768.	794.3	802.8	810.2	.....	805.	659.7
14.....	779.2	774.7	775.5	779.5	820.8	842.	815.4	774.4	741.1	808.3	843.2	813.8	799.	644.8
15.....	808.3	803.7	793.1	783.8	802.6	827.2	819.1	802.5	814.2	823.3	834.7	834.7	812.3	657.1
16.....	835.9	809.4	826.2	836.6	849.7	837.6	838.6	845.3	*720.6	855.5	890.7	894.3	836.6	691.3
17.....	897.2	897.5	916.5	880.4	956.	975.2	944.4	872.7	893.3	955.1	976.	932.2	926.	763.8
18.....	954.	941.8	898.4	930.5	972.4	986.5	952.2	837.5	782.7	805.3	791.6	805.8	897.4	731.9
20.....	779.4	803.3	763.	777.6	774.7	801.7	767.6	761.8	760.1	771.9	786.1	771.1	778.1	640.5
21.....	756.1	747.9	744.7	757.9	755.7	802.6	764.2	751.4	767.	772.1	794.1	780.2	766.1	634.6
22.....	765.6	749.1	750.2	756.1	776.	783.	795.6	774.3	779.9	800.4	786.7	815.	777.7	638.8
23.....	855.8	815.1	807.7	779.9	829.6	824.5	834.8	811.5	779.7	779.7	780.	786.5	806.9	665.8
24.....	778.3	761.1	766.1	757.9	783.2	800.7	787.1	796.8	756.2	797.8	793.	786.1	779.5	639.7
25.....	768.	768.9	753.	745.3	792.1	755.4	803.9	760.2	735.7	819.2	791.9	790.3	773.7	634.5
27.....	792.	763.	777.1	776.9	798.8	826.3	812.2	777.8	786.2	802.	791.	787.8	791.2	645.9
28.....	806.4	779.9	760.	776.	796.7	816.8	795.5	793.3	814.	840.	828.8	815.8	802.1	651.1
29.....	792.6	768.6	815.8	796.8	811.	815.9	827.1	812.1	746.2	855.6	879.6	858.3	816.5	658.1
30.....	810.4	827.	807.5	826.8	822.5	838.5	845.5	832.1	801.9	832.1	780.3	810.8	818.8	670.3
31.....	793.3	797.1	798.2	767.4	828.5	819.8	816.9	824.9	796.2	796.3	812.	806.8	806.4	659.8
Means.....	783.6	776.1	769.9	766.2	793.6	807.7	791.6	764.8	753.6	787.6	792.2	789.6	781.26	.....
Reduced to 32° F.	644.4	639.4	638.1	635.6	660.2	671.7	649.8	618.9	609.6	639.1	646.6	648.5	641.84	.....

* Bar surrounded with ice, to get correction for temperature.

Instruments as in June.

[1840.]

JULY.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

Göttingen time....	h. m. 6 03½	h. m. 8 03½	h. m. 10 03½	h. m. 12 03½	h. m. 14 03½	h. m. 16 03½	h. m. 18 03½	h. m. 20 03½	h. m. 22 03½	h. m. 0 03½	h. m. 2 03½	h. m. 4 03½	Means
Observatory time...	h. m. 6 03	h. m. 8 03	h. m. 10 03	h. m. 12 03	h. m. 14 03	h. m. 16 03	h. m. 18 03	h. m. 20 03	h. m. 22 03	h. m. 0 03	h. m. 2 03	h. m. 4 03	
July 1.....	78.9	77.4	75.5	74.	73.	73.	74.5	75.	75.	76.	74.	73.	74.9
2.....	71.5	69.9	68.	67.4	67.3	68.	69.4	70.5	70.2	70.	69.5	68.9	69.3
3.....	68.	67.4	66.3	66.3	66.3	66.	66.	67.	67.	66.1	66.1	65.8	66.5
4.....	65.5	64.5	63.6	64.3	66.	66.	70.5	72.5	75.5	75.9	74.	70.	69.3
5.....	71.7	69.9	68.2	68.6	70.	70.	72.	73.	73.8	72.	70.4	70.	70.1
6.....	67.	66.4	66.2	66.3	67.	68.	69.	70.	72.8	72.	70.4	70.	69.8
7.....	69.9	68.5	68.7	68.	68.	69.	71.	72.5	72.8	73.2	73.	72.5	70.7
8.....	72.8	72.5	72.2	72.6	73.5	74.5	75.	76.	76.8	76.	75.9	73.8	74.3
9.....	72.7	72.	71.4	71.5	72.	73.	75.5	78.	79.	80.	79.5	78.	75.3
10.....	76.	75.7	74.5	74.	74.5	76.	78.	80.5	82.1	82.4	82.	76.8	77.7
11.....	78.7	77.6	75.9	75.1	76.	77.	79.	78.	78.	78.5	78.	....	77.4
12.....	78.	77.7	77.1	77.3	79.	80.	82.	82.	83.1	83.8	82.3	80.3	80.3
13.....	78.5	77.1	75.8	74.9	77.	78.	81.	84.	86.1	86.3	83.9	84.	80.5
14.....	82.4	80.9	79.1	78.1	80.	81.	86.	80.	*39.4	76.	83.	83.4	77.4
15.....	82.8	81.1	79.8	79.2	79.5	80.3	82.5	84.	85.6	86.9	86.	84.4	82.7
16.....	83.7	82.1	80.8	79.9	80.	81.4	81.5	82.5	80.5	79.	78.2	77.3	80.6
17.....	78.9	76.6	74.6	73.9	74.	73.5	74.	....	75.	76.6	75.	72.7	75.
18.....	71.4	70.2	68.8	68.4	70.	71.	73.5	76.	78.	78.8	76.4	74.5	73.1
19.....	72.2	71.1	70.1	70.3	72.	74.	....	77.5	81.5	81.3	79.	78.	76.4
20.....	77.2	76.1	74.6	74.	75.3	76.8	77.9	77.5	77.	76.	75.5	74.9	76.1
21.....	74.	73.7	73.6	73.3	75.	75.5	76.5	78.	79.	78.	76.6	75.4	76.7
22.....	74.1	73.6	73.	71.5	73.	73.	74.7	76.8	78.9	80.8	79.5	78.	76.5
23.....	76.8	75.	73.7	72.8	74.	74.	77.	79.	83.	83.	81.5	79.4	77.4
24.....	78.8	77.	75.7	75.	76.5	77.	79.	80.5	82.9	84.	83.	81.8	79.3
25.....	81.	80.2	79.8	79.1	80.	81.	83.	84.	84.8	84.8	82.8	80.9	81.5
26.....	78.	76.1	74.3	73.9	75.5	76.5	79.	81.	82.7	83.5	81.7	79.5	78.4
27.....	78.2	77.1	76.3	75.6	76.	77.	78.5	80.	79.9	79.	78.6	77.8	77.8
Means.....	75.5	74.4	73.2	72.8	73.7	74.5	76.3	77.6	77.	78.4	77.5	76.1	75.57

* Bar surrounded with ice, to get correction for temperature.

[1940.

TRIPLE OBSERVATIONS.

JULY.]

	Declination.			Vertical force.						Horizontal force.			Tempera- ture Fah- renheit.
	<i>h. m.</i> 13 52½ 8 12	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 07½ 8 27	<i>h. m.</i> 13 50 8 9½	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 14 05 8 24½	<i>h. m.</i> 14 05 8 24½	Tempera- ture Fah- renheit.	<i>h. m.</i> 13 55 8 14½	<i>h. m.</i> 14 02½ 8 22	<i>h. m.</i> 14 10 8 29½		
Göttingen time.....													
Observatory time...													
July 1.....	662.3	662.7	658.5	493.7	453.5	471.2	79.	673.9	672.2	673.2	73.		
2.....	664.	664.4	663.9	390.	403.6	405.7	75.	651.9	656.6	659.9	67.3		
3.....	655.8	654.7	655.7	345.8	372.7	372.7	74.5	639.	634.6	639.4	66.2		
4.....	659.7	663.9	655.1	323.7	317.6	326.6	74.	625.5	631.3	632.3	66.		
6.....	643.2	643.9	643.5	367.2	345.6	356.6	76.	683.7	666.1	661.5	69.5		
7.....	656.4	655.4	655.4	261.	274.9	293.6	72.	766.	768.5	774.2	67.		
8.....	641.4	642.4	645.8	408.3	468.6	443.2	74.	777.9	778.2	783.4	68.		
9.....	652.3	649.3	648.5	389.5	409.8	429.4	74.5	805.	813.3	816.9	73.5		
10.....	649.	646.7	648.3	351.5	391.1	392.9	75.	773.1	768.5	766.7	72.		
11.....	653.8	651.1	645.7	447.7	510.7	523.4	77.	895.2	836.6	839.8	74.5		
13.....	655.4	656.8	653.9	549.4	555.4	562.9	80.	850.5	831.	829.3	76.		
14.....	669.4	665.	667.	537.5	552.4	532.6	81.	818.2	820.8	822.4	79.		
15.....	659.7	661.3	660.3	507.2	502.7	507.7	80.	801.2	802.6	806.	76.8		
16.....	658.6	656.9	654.	602.1	603.	607.2	82.	852.3	849.7	847.5	80.		
17.....	648.1	649.2	647.5	642.6	719.6	752.9	83.	947.6	956.	964.1	79.5		
18.....	653.2	650.6	644.8	704.4	727.2	723.8	84.5	960.4	972.4	973.4	80.		
20.....	530.2	531.6	531.3	480.7	486.5	479.8	73.	778.	774.7	766.5	74.		
21.....	503.5	503.9	503.2	38.	55.7	58.7	73.	747.5	755.7	752.9	70.		
22.....	508.4	508.4	507.3	151.8	134.9	135.4	72.5	777.2	776.	775.5	72.2		
23.....	507.5	507.5	507.3	.....	120.6	.....	78.5	.....	829.6	.....	76.3
24.....	501.5	502.2	501.6	42.6	43.8	43.5	75.	776.4	783.2	790.1	75.		
25.....	498.1	500.8	500.9	11.	11.8	19.6	73.2	806.9	792.1	788.6	73.		
27.....	504.5	504.3	504.	2.9	27.6	14.8	74.	794.2	798.8	802.5	74.		
28.....	511.7	511.8	512.	138.4	89.5	110.4	76.3	793.7	796.7	799.2	76.5		
29.....	510.7	510.5	511.5	15.6	2.5	7.3	80.	811.2	811.	816.4	80.		
30.....	507.8	504.9	500.8	.....	40.7	33.	75.5	811.2	822.5	828.9	75.5	
31.....	507.6	508.6	507.9	85.2	102.7	100.5	76.	823.2	828.5	836.6	76.		

Göttingen time..... Observatory time....	A. m. 6 00 0 19½	A. m. 8 00 2 19½	A. m. 10 00 4 19½	A. m. 12 00 6 19½	A. m. 14 00 8 19½	A. m. 16 00 10 19½	A. m. 18 00 12 19½	A. m. 20 00 14 19½	A. m. 22 00 16 19½	A. m. 0 00 18 19½	A. m. 2 00 20 19½	A. m. 4 00 22 19½	Means.
Aug. 1.....	495.7	498.1	495.7	499.	506.	491.4	485.7	483.4	486.7	496.4	497.	496.7	494.4
3.....	496.1	498.6	495.8	507.7	513.	495.5	482.9	483.8	492.3	497.5	495.9	494.5	496.5
4.....	496.9	496.7	501.4	511.9	513.3	498.2	481.9	482.2	486.9	494.	495.3	496.5	496.3
5.....	496.4	497.7	498.5	509.3	513.3	498.	483.9	482.2	486.9	493.2	494.9	495.	495.3
6.....	497.1	489.4	501.	505.9	510.7	493.1	491.9	487.1	486.1	493.3	493.9	494.3	494.6
7.....	494.6	497.5	500.6	506.1	515.1	496.	486.4	486.8	494.2	499.5	495.1	495.3	497.3
8.....	495.7	494.7	501.9	493.9	498.3	473.3	484.4	463.2	477.7	485.1	495.5	495.9	498.1
9.....	496.2	500.8	500.3	508.	507.8	486.1	476.2	478.	484.8	493.	502.2	496.1	494.3
10.....	498.6	491.	495.8	507.	508.3	485.3	488.2	484.7	493.9	497.5	492.5	494.3	495.2
11.....	494.6	493.3	494.9	506.6	504.	485.4	478.7	483.	487.	493.5	493.2	498.	492.8
12.....	495.2	492.6	499.4	506.5	506.3	494.5	480.1	479.2	487.3	490.	490.1	496.8	493.5
13.....	492.1	496.8	497.8	507.8	506.9	491.6	476.5	480.5	486.5	498.2	493.4	500.	493.2
14.....	503.	499.3	492.7	501.9	509.1	492.7	479.3	481.2	489.	494.9	492.8	494.9	494.1
15.....	494.8	494.4	495.3	506.	509.5	494.8	478.2	480.8	489.3	495.5	492.7	494.3	493.8
16.....	495.7	496.3	497.1	505.6	509.6	495.5	481.1	481.8	488.7	494.1	493.9	497.1	494.7
17.....	508.	498.8	506.2	511.5	506.1	485.4	475.4	484.1	471.2	493.6	499.7	544.	498.7
18.....	504.6	504.6	500.7	507.1	505.9	483.	480.6	480.6	485.9	490.1	497.3	500.	495.
19.....	496.4	489.	499.	497.7	503.8	483.7	483.4	483.4	487.6	489.8	493.2	500.7	492.1
20.....	488.4	473.4	504.3	509.7	495.9	476.3	475.2	479.5	486.3	487.1	499.	500.	489.7
21.....	500.9	493.3	499.9	493.8	508.3	491.8	474.9	480.2	500.1	492.9	542.3	512.4	498.3
22.....	478.5	502.	500.5	501.5	492.8	480.3	478.7	486.2	486.6	501.9	510.3	496.8	498.
23.....	507.7	488.8	500.5	506.9	495.4	478.9	480.8	484.3	491.5	496.3	535.4	496.3	496.6
24.....	486.2.	481.5	473.6	503.1	504.5	491.8	479.	473.9	491.6	499.1	510.	494.8	490.8
25.....	505.3	484.4	495.2	510.3	511.8	495.6	486.9	482.7	491.3	490.8	499.	526.	496.3
26.....	489.	499.6	512.4	531.9	516.4	485.8	477.7	484.3	480.9	492.5	492.8	492.1	496.5
27.....	492.	492.7	493.4	503.7	510.4	494.9	478.9	478.1	480.9	487.	487.8	490.9	491.1
Means.....	496.	493.7	496.4	505.8	507.	489.6	490.5	481.2	486.	493.5	499.	492.3	494.35

Instruments in the observatory. Unit of scale, 0'.453. Increasing readings correspond to decreasing westerly declination.

[1840.]

VERTICAL FORCE MAGNETOMETER.

Aveser.]

Göttingen time. Observatory time.	A. m. 5 57½ 0 17	A. m. 7 57½ 2 17	A. m. 9 57½ 4 17	A. m. 11 57½ 6 17	A. m. 13 57½ 8 17	A. m. 15 57½ 10 17	A. m. 17 57½ 12 17	A. m. 19 57½ 14 17	A. m. 21 57½ 16 17	A. m. 23 57½ 18 17	A. m. 1 57½ 20 17	A. m. 3 57½ 22 17	Means.	Reduc'd to 32° Fah.
Aug. 1.....	104.2	147.1	187.5	147.9	152.1	85.9	52.4	22.	48.3	9.7	72.9	116.2	92.7	238.1
3.....	113.8	103.4	141.5	173.	178.4	-103.2	-85.	-134.6	-148.5	-108.2	-106.6	-78.1	-4.9	139.6
4.....	-40.5	-89.4	-70.5	-4.2	-28.9	-97.3	-179.3	-176.	-241.6	-194.1	-255.6	-212.2	-99.8	46.8
5.....	-128.4	-121.5	-59.9	-110.1	-151.2	-142.9	-143.6	-215.8	-264.9	-294.9	-269.2	-232.4	-178.8	-27.8
6.....	-157.8	-205.4	-1.8	101.8	91.	56.7	-41.8	-36.3	-55.2	-42.3	-18.7	-22.4	-24.	121.4
7.....	162.8	19.	114.7	154.5	132.	111.4	139.6	120.9	205.2	196.2	291.9	300.3	166.	299.8
8.....	265.7	304.	243.1	328.9	237.4	191.5	162.4	282.1	222.4	190.	155.8	140.2	236.1	360.9
10.....	202.2	313.6	293.3	296.6	246.9	167.8	221.3	175.3	155.1	72.1	112.9	157.3	200.5	327.2
11.....	176.	184.4	261.1	311.1	289.1	201.1	98.5	96.9	75.6	67.	117.3	217.6	174.6	310.3
12.....	181.2	219.3	238.8	300.	297.4	208.5	118.6	74.5	-230.9	-259.	-218.	-247.7	50.4	189.2
13.....	-149.4	-78.8	-36.2	-18.4	-87.1	-57.7	-73.8	-62.9	-4.7	-4.	26.1	52.4	-40.4	95.9
14.....	37.4	51.8	48.6	88.2	98.6	12.	85.3	-49.5	-99.6	-190.3	-166.9	-157.8	-84.3	100.2
15.....	-114.8	-4.8	33.1	56.	40.7	-153.7	-137.1	-172.	-255.7	-248.8	-243.8	-147.3	-117.5	21.6
17.....	9.2	21.3	58.7	95.6	26.8	-85.9	-224.1	-208.4	-181.8	-194.7	-197.3	-145.3	-94.9	41.1
18.....	-70.7	15.7	1.	51.7	59.3	26.	-35.7	-62.6	-135.3	-170.4	-189.1	-121.4	-55.2	76.1
19.....	-38.6	25.	16.9	89.3	79.	-152.1	-177.	-187.	-61.3	-110.7	-71.9	-128.3	-72.9	64.1
20.....	-100.9	-57.2	63.6	49.7	59.9	-79.	-150.4	-197.9	-234.6	-246.2	-162.5	-113.	-105.6	38.5
21.....	-86.2	-117.8	-29.7	-6.6	45.1	77.9	-138.4	-112.4	-269.4	-239.1	-204.1	-154.2	-124.3	24.5
22.....	-310.	-207.	9.	25.2	89.1	1.3	-118.9	-143.	-232.6	-297.9	-247.2	-257.2	-154.8	-4.4
24.....	-198.2	-244.9	-20.2	13.	68.9	-98.6	-49.3	-86.8	-66.4	-122.7	-168.8	-212.2	-110.3	32.3
25.....	-10.	-117.1	104.5	89.4	-38.8	14.2	-55.2	46.2	-47.5	-56.3	-76.6	-47.	-15.3	117.9
26.....	-155.7	60.9	33.3	-42.1	34.2	53.2	73.5	2.6	-38.	-41.9	-25.4	21.	-2.3	121.6
27.....	34.2	20.4	54.6	138.4	38.3	70.7	19.	-17.6	-131.5	-56.9	-95.9	-50.5	-1.2	126.1
28.....	-131.6	-60.1	59.1	175.6	120.9	78.3	5.9	-26.4	.....	-12.5	-99.8	-407.5	-25.3	105.7
29.....	-232.4	-155.8	57.9	69.1	16.2	-11.6	9.7	-28.8	-36.9	-130.	-97.2	-63.9	-51.	86.
31.....	-0.1	25.8	102.8	91.2	27.7	16.7	-67.2	-59.	-110.7	-150.9	-112.5	-97.2	-27.6	114.7
Means.....	-23.8	1.2	77.3	104.2	50.2	9.1	-34.3	-37.3	-80.8	-102.3	-85.8	-71.4	-16.2	.....
Reduced to 32° Fah.	113.5	135.4	208.	233.	180.6	142.5	103.6	104.7	86.2	45.6	59.3	69.9	....	191.7

Instruments in the observatory. Unit of force, .000,016,5. Increase of reading corresponds to

[1846.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

August.]

Göttingen time Observatory time	A. m. 5 57½ 0 17	A. m. 7 57½ 2 17	A. m. 9 57½ 4 17	A. m. 11 57½ 6 17	A. m. 13 57½ 8 17	A. m. 15 57½ 10 17	A. m. 17 57½ 12 17	A. m. 19 57½ 14 17	A. m. 21 57½ 16 17	A. m. 23 57½ 18 17	A. m. 1 57½ 20 17	A. m. 3 57½ 22 17	Means.
Aug. 1	77.8	77.2	77.7	76.	75.7	76.7	79.	81.	81.3	81.8	81.5	79.5	78.6
2	78.	78.5	77.5	77.	77.5	77.5	77.5	79.	80.3	80.	79.	77.8	78.3
3	77.	76.6	76.	76.7	76.3	77.4	79.	80.8	82.5	83.3	82.	79.	79.
4	80.2	79.8	79.	79.	80.	79.	79.6	81.	82.2	83.	82.	79.8	80.4
5	78.8	77.4	76.8	76.	75.6	77.	78.6	80.	81.	82.	81.8	79.2	78.6
6	79.2	78.3	77.5	76.	75.	76.	74.5	75.	73.	71.5	72.8	70.8	74.9
7	70.	69.6	69.2	68.5	70.	71.	73.8	75.8	76.8	76.9	75.	74.	72.
8	71.7	69.	68.3	69.	69.3	72.3	74.	74.	75.5	76.7	76.1	76.	73.6
9	74.3	73.4	73.7	72.	73.1	74.3	78.4	78.3	78.4	77.8	77.2	76.	75.5
10	75.	74.	73.8	73.	73.2	74.	76.	78.	81.	81.	80.5	80.	76.5
11	78.6	77.	76.5	76.5	74.5	76.	75.	75.	75.1	75.2	76.	74.5	75.7
12	74.5	73.8	73.8	72.2	72.	73.	74.3	75.3	77.8	78.8	78.5	76.8	75.1
13	76.3	75.	74.	73.3	74.4	76.1	76.	78.2	80.2	80.9	79.5	76.8	76.6
14	74.2	73.2	73.4	71.7	73.2	74.7	76.	78.	79.3	78.8	78.	76.8	75.6
15	74.	73.4	73.3	71.	70.6	71.5	72.8	74.2	76.8	78.	77.	76.2	74.1
16	75.	74.	73.	71.8	73.5	74.8	76.8	78.	80.6	81.5	79.5	77.8	75.9
17	76.	75.3	74.5	74.	75.6	76.8	78.	81.	83.	83.	81.	80.5	78.2
18	79.	77.6	76.4	75.2	76.3	77.8	80.5	81.7	83.8	84.	82.8	80.5	79.7
19	79.7	78.4	77.	76.5	76.	77.3	79.3	81.6	83.3	85.2	84.5	83.	80.2
20	79.2	77.3	76.3	75.	75.8	75.9	76.7	78.	79.8	80.7	81.	77.	77.7
21	75.4	74.2	73.7	72.6	74.2	74.1	74.4	75.6	76.8	76.7	75.	74.5	74.7
22	72.6	72.	69.4	67.7	69.5	70.	71.4	73.	75.	76.	75.	73.2	71.7
23	72.	70.6	69.4	68.7	69.2	70.5	72.6	74.2	76.8	76.8	76.8	76.	72.8
24	74.2	73.1	71.7	71.	70.6	72.3	74.	75.2	-	77.8	77.5	77.	74.
25	76.	75.7	74.	74.	74.9	74.5	76.7	77.2	78.	78.2	77.8	77.	75.9
26	76.6	76.4	75.2	75.5	75.6	76.4	78.4	79.9	80.7	80.6	78.8	77.2	77.6
27	76.	75.	73.9	73.3	73.8	74.6	76.2	77.5	79.1	79.4	78.6	77.3	76.2
28	76.	75.	73.9	73.3	73.8	74.6	76.2	77.5	79.1	79.4	78.6	77.3	76.2
29	76.6	76.4	75.2	75.5	75.6	76.4	78.4	79.9	80.7	80.6	78.8	77.2	77.6
30	76.	75.	73.9	73.3	73.8	74.6	76.2	77.5	79.1	79.4	78.6	77.3	76.2
31	76.	75.	73.9	73.3	73.8	74.6	76.2	77.5	79.1	79.4	78.6	77.3	76.2

Correction for temperature as before.

Degrees Fahrenheit.

[1940.]

HORIZONTAL FORCE MAGNETOMETER.

ANALYST.]

Göttingen time... Observatory time	h. m. 6 02½ 0 32	h. m. 8 02½ 2 32	h. m. 10 02½ 4 32	h. m. 12 02½ 6 32	h. m. 14 02½ 8 32	h. m. 16 02½ 10 32	h. m. 18 02½ 12 32	h. m. 20 02½ 14 32	h. m. 22 02½ 16 32	h. m. 0 02½ 18 32	h. m. 2 02½ 20 32	h. m. 4 02½ 22 32	Means.	Reduced to 32° F.
Aug. 1.....	796.7	803.1	798.3	804.5	810.7	854.1	823.	805.1	818.6	832.9	824.3	826.3	816.5	668.
3.....	789.6	799.4	789.	786.7	805.5	847.9	828.2	794.4	797.7	800.1	795.1	795.6	804.2	657.
4.....	791.	771.4	771.	770.3	805.5	839.3	816.7	828.4	824.6	817.1	814.1	805.4	803.3	654.2
5.....	807.5	797.8	798.8	795.1	809.9	815.3	808.7	828.4	825.5	820.3	812.2	819.3	811.3	657.7
6.....	808.9	797.4	797.3	796.3	825.7	841.	798.2	806.3	823.4	813.4	815.4	823.9	809.9	663.1
7.....	814.3	802.6	805.6	810.7	839.	847.1	880.1	803.4	774.2	792.3	793.5	791.3	807.8	673.4
8.....	776.7	773.8	764.5	768.5	764.1	779.4	813.8	771.6	793.4	865.7	845.1	830.5	795.5	668.5
10.....	811.4	799.8	794.	783.9	821.3	837.3	805.3	779.1	783.4	810.4	819.3	833.3	805.7	678.3
11.....	820.1	812.3	816.7	802.8	817.5	842.8	829.9	853.2	837.	803.9	816.9	810.9	800.9	686.5
12.....	805.9	803.7	802.5	795.8	825.	827.3	805.3	788.1	823.9	826.3	827.7	848.	814.1	673.
13.....	850.4	814.6	818.6	820.7	864.4	868.9	819.7	812.3	782.2	805.8	813.	815.8	821.4	683.8
14.....	786.3	799.1	794.1	795.8	830.7	854.4	827.9	789.5	787.7	822.3	836.6	859.8	815.5	679.8
15.....	816.4	825.1	838.6	823.1	843.5	844.5	826.6	793.9	807.8	827.2	835.3	830.8	826.8	685.4
17.....	803.5	807.1	804.1	795.7	830.2	867.8	834.8	810.	800.2	816.4	813.6	819.6	818.6	679.4
18.....	808.3	804.6	801.2	793.5	831.5	844.5	830.1	809.1	811.5	817.6	816.3	817.5	815.5	682.7
19.....	811.1	807.8	817.6	795.	898.7	823.9	811.3	826.5	873.9	874.6	941.5	925.8	850.6	710.1
20.....	909.8	856.	832.8	836.2	879.3	938.7	884.3	876.7	881.2	.....	871.	873.7	876.2	730.3
21.....	865.7	866.	853.3	860.8	881.8	864.3	881.7	868.7	842.8	892.1	896.5	876.7	872.5	731.1
22.....	933.1	891.2	859.6	864.7	914.	911.3	913.6	891.8	873.4	868.2	880.7	901.8	893.6	758.6
24.....	819.1	861.4	870.8	859.	896.6	911.1	961.2	871.7	849.4	910.	828.3	905.1	887.	743.4
25.....	874.4	899.6	857.5	844.	914.2	935.9	853.6	870.5	871.4	850.8	848.4	843.6	872.4	738.
26.....	829.5	834.4	834.9	816.5	874.4	887.7	859.8	831.7	840.	863.3	783.3	803.8	838.3	714.1
27.....	776.4	784.7	825.3	791.5	829.4	836.9	.....	.....	.....	898.2	886.7	845.1	887.1	701.3
28.....	878.8	852.3	840.	844.5	883	892.7	895.5	846.8	839.4	901.6	895.4	929.2	874.1	740.7
29.....	1015.8	896.7	943.	923.3	922.4	924.5	869.9	856.3	860.	905.9	880.8	884.1	908.5	771.5
31.....	887.7	877.3	872.	878.9	928.	942.8	933.1	830.2	866.5	861.1	867.4	853.6	883.2	737.6
Means	838.9	824.6	822.8	817.6	852.7	864.8	848.	825.4	825.7	843.9	839.6	844.7	837.41	.....
Reduced to 32° F.	701.	690.5	692.2	689.0	720.2	728.8	706.2	678.5	675.	692.9	692.1	701.7	.....	698.11

NOTE.—On the 27th day, at 12h. 22m., the mirror was accidentally deranged. The observed numbers from this date to September 23, at 12h. 22m., have been brought to a comparison with the former numbers by the mean positions of the needle for 6 previous days, (in some cases 7,) and by the hour from 0h. 22m. to 22h. 22m., inclusive. Probable error, 3.3 divisions.

[1840.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

August.]

Göttingen time... Observatory time.	A. m. 6 03½ 0 22	A. m. 8 03½ 2 22	A. m. 10 03½ 4 22	A. m. 12 03½ 6 22	A. m. 14 03½ 8 22	A. m. 16 03½ 10 22	A. m. 18 03½ 12 22	A. m. 20 03½ 14 22	A. m. 22 03½ 16 22	A. m. 0 03½ 18 22	A. m. 2 03½ 20 22	A. m. 4 03½ 22 22	Means.
Aug. 1.....	77.	76.3	75.9	75.1	75.3	76.7	78.5	80.5	81.5	82.5	81.8	80.1	78.4
3.....	78.	77.2	76.7	76.6	77.	77.	77.5	79.5	80.2	79.8	78.8	77.6	76.
4.....	76.5	75.8	74.9	74.5	76.4	77.8	79.3	81.2	82.7	82.4	81.9	80.5	78.6
5.....	79.1	78.3	78.	78.2	79.7	80.	80.	81.	82.4	83.	81.	79.5	80.
6.....	77.8	76.3	74.9	74.	75.5	77.2	79.	80.6	82.4	82.1	80.5	79.1	78.2
7.....	78.3	77.4	76.5	75.1	78.	74.	73.8	73.	71.9	70.9	69.9	69.	74.
8.....	68.7	67.2	66.7	67.3	69.3	71.	73.6	75.2	76.5	77.	75.2	73.3	71.7
10.....	70.9	68.5	67.2	66.9	69.	70.	72.	74.	75.7	77.	76.	74.6	71.8
11.....	73.	72.1	71.4	70.9	71.8	74.	77.	78.7	78.7	77.7	76.9	75.6	74.3
12.....	74.1	73.	72.	70.8	71.8	74.	76.2	78.1	81.1	80.9	80.2	79.6	76.1
13.....	78.	76.6	75.4	74.7	74.	74.6	75.1	75.	74.3	74.2	73.6	74.1	75.
14.....	73.4	72.9	71.8	71.1	70.4	72.6	74.	75.6	77.4	78.9	77.9	76.8	74.4
15.....	75.8	74.1	72.9	72.2	68.9	75.	76.2	78.2	80.2	80.6	79.2	76.8	76.2
17.....	73.5	72.3	71.2	71.	73.	74.8	76.8	78.8	79.9	79.8	79.7	76.9	75.5
18.....	73.5	71.8	70.5	69.9	69.9	71.	72.6	74.3	77.	78.3	77.3	76.8	73.5
19.....	74.1	73.1	72.	71.	73.1	74.7	77.	78.7	80.4	81.	79.2	77.	75.9
20.....	76.7	74.7	73.6	73.1	75.3	77.	79.4	81.	83.	84.	82.	79.9	77.6
21.....	78.4	77.	76.5	74.4	76.3	77.4	80.1	83.1	83.9	84.1	82.2	80.8	79.3
22.....	79.2	78.	76.7	75.9	76.	77.5	79.4	81.9	84.2	85.3	83.9	82.3	74.2
24.....	76.9	76.9	75.4	74.	75.3	76.7	78.6	77.9	79.2	80.7	79.	77.1	77.2
25.....	75.	73.2	71.8	71.5	73.3	73.5	74.2	75.4	76.	76.	74.6	73	74.
26.....	71.3	69.7	68	66.6	68.8	69.4	70.6	72.5	74.3	74.6	72.2	72.2	70.8
27.....	70.9	69.5	68.1	67.2	68.4	70.1	71.5	73.5	75.5	76.8	76.1	74.9	71.3
28.....	73.2	71.9	70.7	70.	70.1	72.2	74.5	77.	78.	78.	76.6	75.2	73.7
29.....	73.4	72.2	71.1	71.7	72.1	74.	76.	77.5	78.2	78.2	76.5	76.4	74.8
31.....	76.1	75.	74.5	74.5	75.8	76.6	78.9	80.	81.5	81.1	79.2	76.9	77.5
Means.....	75.1	73.9	72.8	72.2	73.4	74.5	76.3	77.9	79.1	79.2	78.1	76.7	75.53

Degrees Fahrenheit.

Corrections for temperature as before.

	Declination.			Vertical force.				Horizontal force.				Temperature Fahrenheit.
	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	
Göttingen time.....	13 52½	14 00	14 07½	13 50	13 57½	14 05	13 55	14 02½	14 10	14 17	14 24	75 3
Observatory time.....	8 12	8 19½	8 27	8 09½	8 17	8 24½	8 14½	8 22	8 29½	8 37	8 44	77.
Aug. 1.....	506.2	506.	505.4	180.6	162.1	144.7	809.4	810.7	810.7	810.7	810.7	75 3
3.....	512.6	513.	511.9	171.6	176.4	160.9	823.2	825.5	828.7	828.7	828.7	77.
4.....	512.9	512.2	511.3	— 42.1	— 28.9	— 10.	806.6	808.9	809.6	809.6	809.6	76.3
5.....	513.7	513.2	511.4	— 150.9	— 151.2	— 160.9	808.4	809.9	813.4	813.4	813.4	79.7
6.....	518.7	510.7	510.	84.3	91.	97.1	824.	825.7	838.4	838.4	838.4	75.5
7.....	514.9	515.1	513.4	154.1	132.	120.8	840.8	839.	839.3	839.3	839.3	78.
8.....	496.5	498.3	498.3	278.4	237.4	270.4	766.5	764.1	775.3	775.3	775.3	69.4
10.....	507.8	507.8	507.	256.5	246.9	283.	816.2	821.3	824.4	824.4	824.4	69.
11.....	507.8	508.3	508.4	306.8	289.1	392.8	811.9	817.5	818.3	818.3	818.3	71.7
12.....	507.2	504.	505.6	266.7	297.4	280.5	826.2	825.1	824.	824.	824.	71.8
13.....	509.6	508.3	508.	— 22.	— 87.1	— 83.1	860.2	864.4	864.6	864.6	864.6	74.
14.....	506.7	506.9	505.2	86.	98.6	93.7	829.5	830.7	832.3	832.3	832.3	70.5
15.....	512.6	509.1	513.2	28.1	— 40.7	— 52.4	834.7	843.5	847.2	847.2	847.2	73.9
17.....	510.4	509.5	508.9	— 3.8	— 26.3	— 19.3	835.9	830.2	832.3	832.3	832.3	73.
18.....	509.3	509.6	508.1	70.8	59.3	73.4	828.4	831.5	833.8	833.8	833.8	70.
19.....	509.2	506.1	502.8	— 28.6	— 79.	— 18.3	899.2	898.7	912.7	912.7	912.7	73.2
20.....	508.9	505.9	506.4	— 95.3	— 59.9	— 88.6	883.2	879.3	883.1	883.1	883.1	75.4
21.....	503.7	503.8	502.3	— 32.6	— 45.1	— 66.4	876.8	881.8	890.4	890.4	890.4	76.2
22.....	495.5	495.9	498.8	— 61.	— 89.1	13.3	913.2	914.	933.6	933.6	933.6	76.
24.....	508.7	508.3	502.8	— 40.2	— 68.9	— 43.5	897.2	896.6	882.1	882.1	882.1	75.3
25.....	496.9	492.8	485.7	13.9	— 38.8	— 74.2	907.3	914.2	919.3	919.3	919.3	73.3
26.....	501.3	495.4	495.8	40.8	34.2	49.1	874.1	874.4	887.1	887.1	887.1	68.8
27.....	503.8	504.5	505.4	122.6	36.3	91.4	835.	839.4	831.6	831.6	831.6	68.4
28.....	514.	511.8	509.8	87.3	120.9	145.8	887.3	889.	891.3	891.3	891.3	70.1
29.....	.....	516.4	.....	.....	16.2	.....	.....	.....	.....	.....	.....	72.1
31.....	511.4	510.4	510.1	42.7	27.7	49.3	925.7	928.	930.	930.	930.	75.8

[1840.]

DECLINATION MAGNETOMETER.

SEPTEMBER.]

	A. m. 6 00 0 19½	A. m. 8 00 2 19½	A. m. 10 00 4 19½	A. m. 12 00 6 19½	A. m. 14 00 8 19½	A. m. 16 00 10 19½	A. m. 18 00 12 19½	A. m. 20 00 14 19½	A. m. 22 00 16 19½	A. m. 0 00 18 19½	A. m. 2 00 20 19½	A. m. 4 00 22 19½	Means.
Sept. 1.....	492.3	512.4	505.7	504.6	500.	486.	482.	477.3	486.7	•	492.9	501.	494.6
2.....	494.	494.2	495.8	506.	506.5	496.2	483.6	482.	486.7	491.9	494.	494.9	494.
3.....	489.5	500.6	491.5	508.2	513.2	491.9	474.	486.5	494.	494.2	496.8	493.7	495.2
4.....	493.	496.5	501.1	508.	508.5	492.1	479.4	483.8	492.3	491.	492.	495.	494.3
5.....	493.9	497.	501.7	511.4	508.7	497.5	475.8	477.7	491.1	491.2	491.	491.	493.2
6.....	497.4	500.3	501.4	513.5	505.2	490.7	479.8	476.1	492.3	490.5	492.	494.1	495.5
7.....	495.4	497.2	492.1	512.5	507.3	487.2	486.	481.1	487.5	491.	494.9	494.8	492.9
8.....	496.3	496.3	497.9	507.6	506.3	489.	483.8	485.7	490.8	494.	494.9	494.	494.8
9.....	500.6	501.5	500.4	507.6	513.1	490.1	475.4	479.6	500.2	493.8	494.2	492.8	495.7
10.....	495.7	495.8	497.	503.6	508.	493.3	473.8	478.3	489.2	492.7	495.9	493.1	493.1
11.....	490.4	498.6	498.2	501.4	503.2	497.8	476.8	479.9	489.3	491.5	487.9	493.9	491.1
12.....	490.7	494.3	497.2	504.1	507.3	494.1	478.7	475.	476.1	489.1	490.1	497.	491.1
13.....	494.2	498.1	495.7	503.2	506.1	492.2	477.1	476.9	487.6	488.7	492.3	493.6	491.7
14.....	491.8	498.	498.3	507.5	504.3	494.1	479.	471.4	477.8	487.7	490.4	498.1	491.5
15.....	523.1	507.4	498.7	506.5	504.7	491.8	477.1	474.	492.9	487.3	488.2	490.	495.1
16.....	510.6	491.1	496.1	490.8	494.6	487.1	478.5	479.9	486.5	490.5	492.4	488.9	490.6
17.....	487.2	495.2	496.3	498.7	493.8	489.	479.8	481.	486.3	486.	489.1	490.1	489.3
18.....	489.1	492.	510.7	498.9	487.3	480.6	473.	483.1	489.3	485.6	533.	482.9	492.1
19.....	482.4	509.5	473.4	501.6	481.9	475.9	462.7	492.4	†511.3	482.	489.4	498.6	488.4
20.....	491.4	489.9	481.1	497.9	492.1	474.9	475.5	485.9	507.2	480.6	502.9	481.	488.4
21.....	485.2	483.5	472.6	476.7	488.1	471.	474.2	477.8	488.1	496.6	533.3	472.9	485.
22.....	490.8	489.3	487.9	480.8	492.9	475.6	476.	491.7	485.	490.8	487.6	485.1	485.1
23.....	481.7	484.8	482.7	490.9	492.9	478.	469.9	480.	485.	490.4	487.6	485.2	484.1
24.....	486.8	499.2	497.3	498.1	497.7	488.4	478.2	476.1	484.9	483.1	490.8	487.8	488.4
25.....	487.	488.9	490	490.8	485.5	494.6	482.2	475.1	481.	503.1	498.3	488.7	488.7
26.....	497.5	492.7	481.6	495.8	500.4	489.5	474.8	473.	476.8	480.4	530.6	487.9	490.1
Means.....	494.1	496.9	493.9	501.1	500.1	487.4	477.1	476.7	489.1	489.2	497.3	491.5	491.38

As before.

* At 18h. 34½m., observation 492.3.

† Four minutes late.

Göttingen time... Observatory time	A. m. 5 57½ 0 17	A. m. 7 57½ 2 17	A. m. 9 57½ 4 17	A. m. 11 57½ 6 17	A. m. 13 57½ 8 17	A. m. 15 57½ 10 17	A. m. 17 57½ 12 17	A. m. 19 57½ 14 17	A. m. 21 57½ 16 17	A. m. 23 57½ 18 17	A. m. 1 57½ 20 17	A. m. 3 57½ 22 17	Means.	Reduced to 32° F.
Sept. 1.....	-42.	11.7	-1.8	189.7	-10.7	-51.3	-55.5	-36.4	-69.3	-120.2	-76.7	0.1	-26.2	99.2
2.....	-8.1	84.7	102.1	145.4	82.5	10.3	-183.7	-157.7	-211.6	-187.3	-154.9	-154.9	-52.8	76.7
3.....	-68.6	-65.4	-8.9	18.6	6.4	2.3	-1.8	7.5	-34.3	17.5	-21.8	101.7	5.6	117.
4.....	142.	141.3	150.2	218.	191.	169.3	173.2	161.5	204.4	190.8	151.6	164.6	173.2	276.2
5.....	199.9	280.6	264.8	232.9	238.3	283.2	286.4	305.8	333.6	268	232.5	297.1	271.3	368.
6.....	195.6	236.4	238.3	273.5	148.2	136.6	18.1	13.5	-11.9	-58.1	-61.	-41.4	90.6	203.8
7.....	7.	59.4	64.4	96.2	107.7	86.4	82.8	-38.4	-67.6	-98.2	-86.	-40.8	14.7	133.6
8.....	-3.3	104.7	78.1	123.1	97.3	91.3	-5.7	-24.6	-75.9	-98.4	-52.5	-17.2	18.1	141.
9.....	-20.1	-19.7	115.	143.5	49.1	23.1	-54.1	-91.8	-84.8	13.8	-2.3	48.9	10.	134.5
10.....	3.5	117.8	191.4	151.7	37.2	143.3	131.9	110.5	113.3	161.7	203.2	238.4	136.1	240.7
11.....	149.6	250.8	295.1	336.1	263.8	242.6	197.6	194.6	161.7	170.9	187.2	237.6	195.4	285.9
12.....	231.4	257.2	278.2	378.7	210.5	153.8	78.4	47.8	20.7	19.3	-1.4	-2.3	139.3	237.9
13.....	-50.6	140.	216.4	236.4	137.2	128.7	4.5	-57.7	-114.4	-138.4	-113.3	-60.8	27.3	135.6
14.....	-97.	-55.2	73.	105.8	101.2	13.9	47.4	-117.	-204.3	-241.2	-230.8	-208.9	-67.8	43.9
15.....	-293.6	-130.1	-42.7	44.3	36.5	50.5	-67.	-50.9	46.1	-6.2	-3.3	-10.	-34.7	82.7
16.....	-159.1	-124.9	66.1	18.8	48.9	50.8	124.3	196.5	261.3	259.5	278.2	249.	104.9	213.5
17.....	224.1	269.8	323.1	331.9	238.4	262.3	215.5	244.2	190.9	220.3	209.8	216.7	245.6	240.8
18.....	232.4	304.6	338.1	383.1	174.6	248.8	343.	377.2	444.6	399.8	355.2	335.2	274.4	366.1
19.....	66.	83.1	208.1	56.8	393.1	394.7	439.9	446.2	383.6	344.8	330.3	313	309.9	364.2
20.....	246.7	291.2	312.9	416.7	532.2	535.	440.9	394.	301.9	165.7	63.3	146.2	320.6	405.1
21.....	75.	178.	32.3	2.8	156.1	53.	98.3	95.7	-13.5	51.2	32.5	37.3	75.2	179.8
22.....	227.1	59.9	164.2	271.	239.9	218.9	142.8	143.2	91.8	59.2	145.7	98.6	154.4	253.6
23.....	210.9	212.1	262.5	284.	303.3	243.3	147.8	147.3	90.4	42.3	33.5	180.4	179.	276.3
24.....	256.2	291.7	310.5	394.5	349.1	246.3	247.	247.	174.3	191.3	239.	251.3	278.	361.
25.....	258.1	325.5	337.4	412.7	365.1	308.3	203.4	173.2	184.1	143.5	120.1	173.3	252.1	340.7
26.....	205.1	236.1	322.9	326.	311.6	352.	216.2	165.8	49.3	65.3	103.9	46.6	198.5	294.
Means.....	86.1	135.5	170.7	208.8	184.8	176.4	125.9	111.	83.2	57.2	73.	99.6	126.02	.....
Reduced to 32° F.	191.9	237.2	268.	303.3	282.4	275.6	230.5	219.6	196.5	170.1	163.8	207.9	.....	230.48

As before.

[1840.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

SEPTEMBER.]

	A. m. 5 57½ 0 17	A. m. 7 57½ 2 17	A. m. 9 57½ 4 17	A. m. 11 57½ 6 17	A. m. 13 57½ 8 17	A. m. 15 57½ 10 17	A. m. 17 57½ 12 17	A. m. 19 57½ 14 17	A. m. 21 57½ 16 17	A. m. 23 57½ 18 17	A. m. 1 57½ 20 17	A. m. 3 57½ 22 17	Means.
Sept. 1.....	75.8	73.	72.6	69.3	71.8	71.9	72.4	73.7	75.	75.	74.2	72.	72.2
2.....	71.7	70.3	69.	68.	70.	70.7	70.3	70.	70.6	70.6	70.7	70.8	73.5
3.....	75.4	74.2	73.	72.	70.8	69.8	70.3	70.8	70.8	70.8	69.5	69.	71.3
4.....	67.8	66.4	66.	63.7	63.8	63.9	63.8	65.	65.5	65.6	66.3	64.8	66.
5.....	64.4	63.7	63.2	62.8	62.4	62.4	62.6	63.	62.7	62.8	62.7	62.8	62.
6.....	65.	64.7	63.7	62.8	65.6	65.7	68.2	70.6	72.4	74.	73.1	74.	68.3
7.....	70.4	68.7	67.	65.8	68.7	68.	70.6	72.	74.5	74.	72.8	71.	70.1
8.....	70.3	69.5	68.9	69.6	68.4	69.5	71.	73.	74.3	75.	73.7	73.2	71.4
9.....	72.8	72.	71.7	71.	71.	72.	73.	73.5	73.2	72.3	71.	69.4	71.9
10.....	68.3	66.6	65.	63.8	66.3	66.5	65.5	65.7	65.6	65.4	64.5	63.4	65.5
11.....	62.	60.6	59.8	57.4	60.5	59.7	60.7	61.8	63.6	63.4	63.	61.	61.
12.....	61.8	60.8	59.4	58.6	62.	61.5	63.5	65.5	67.	68.1	67.8	66.7	68.6
13.....	65.4	63.5	61.	59.8	63.	63.5	67.5	69.4	71.6	73.	72.	70.4	66.7
14.....	69.	65.	61.4	60.5	66.	67.	69.5	72.	70.3	70.2	69.8	73.	67.8
15.....	70.8	69.3	68.5	66.2	66.	67.	70.5	71.	72.4	72.2	71.2	70.7	69.6
16.....	70.2	69.5	68.2	66.	68.7	68.	67.	66.2	65.6	64.6	63.	63.	68.8
17.....	62.2	61.7	60.5	59.8	62.4	61.5	62.5	64.	64.5	64.2	64.	63.	62.5
18.....	64.2	63.2	62.	60.7	63.	60.7	61.	61.	61.	61.	60.8	59.4	61.4
19.....	57.2	55.	53.2	52.2	55.	54.	54.6	56.	58.1	59.2	58.4	56.8	55.8
20.....	54.8	54.	52.8	53.8	55.	55.	58.	61.	64.3	66.7	67.1	67.	59.1
21.....	65.6	64.6	63.6	62.6	62.5	62.8	65.2	67.5	69.8	67.8	66.2	65.5	65.5
22.....	63.	62.3	61.	60.6	60.6	62.	65.	66.	67.6	67.3	66.3	65.	63.8
23.....	63.4	61.8	60.	58.7	60.	60.4	63.	65.	67.2	67.2	66.5	65.2	63.8
24.....	61.	59.8	58.2	57.	57.5	58.	60.	61.8	63.9	63.2	62.6	61.	60.2
25.....	59.7	58.3	57.2	56.	57.2	58.	60.	62.5	64.3	64.5	64.	63.	60.4
26.....	60.8	59.9	59.4	58.8	59.2	60.2	62.	64.	66.	67.	67.	67.2	62.6
Means.....	65.9	64.6	63.2	62.3	63.3	63.8	65.5	66.8	68.	68.2	67.5	66.7	65.48

Degrees Fahrenheit.

SEPTEMBER.]

HORIZONTAL FORCE MAGNETOMETER.

[1840.]

[97]

Göttingen time. Observatory time.	A. m. 6 02½ 0 22	A. m. 8 02½ 2 22	A. m. 10 02½ 4 22	A. m. 12 02½ 6 22	A. m. 14 02½ 8 22	A. m. 16 02½ 10 22	A. m. 18 02½ 12 22	A. m. 20 02½ 14 22	A. m. 22 02½ 16 22	A. m. 0 02½ 18 22	A. m. 2 02½ 20 22	A. m. 4 02½ 22 22	Means.	Reduced to 32° F.
Sept. 1.....	852.6	825.5	844.4	838.3	842.4	866.6	889.	883.3	842.	854.5	869.	885.9	857.7	727.5
2.....	856.2	845.1	837.9	835.3	873.8	899.6	901.2	874.4	864.	870.6	864.9	861.3	865.4	734.2
3.....	874.3	874.1	859.3	816.6	883.1	897.9	861.7	852.	846.9	897.9	894.	823.5	857.6	734.1
4.....	817.5	810.6	804.3	805.7	848.3	868.3	833.8	794.8	791.4	793.	801.5	809.3	814.	711.
5.....	807.1	803.2	800.7	808.2	856.2	860.3	833.2	835.8	816.8*	816.8	811.7	825.3	822.9	726.3
6.....	827.4	827.	816.	832.5	867.8	860.3	880.	848.5	845.2	869.6	863.1	858.5	853.2	738.
7.....	860.8	843.4	844.3	829.	860.8	904.	867.2	875.9	867.7	873.1	868.3	854.7	863.3	743.3
8.....	855.5	850.4	849.1	848.3	871.9	879.3	873.4	819.2	869.5	856.3	873.5	860.2	861.4	737.9
9.....	858.5	865.2	850.7	846.	898.7	932.1	887.8	847.9	849.1	850.8	846.	839.5	864.4	738.6
10.....	839.1	847.7	817.3	810.9	856.6	871.9	864.7	809.3	840.7	811.2	815.7	822.1	832.3	716.8
11.....	788.5	800.2	785.	787.3	824.9	868.	817.3	791.1	797.2	810.1	821.7	822.8	809.5	719.6
12.....	821.5	812.2	819.2	809.3	848.1	885.9	875.	842.8	842.3	848.3	869.6	872.6	845.6	747.
13.....	853.3	828.3	825.4	817.7	858.5	881.2	877.	851.2	851.7	866.7	863.4	867.3	852.6	744.1
14.....	832.1	855.1	883.2	837.7	876.9	894.5	906.	928.7	891.7	870.	868.8	938.5	877.8	757.8
15.....	954.1	885.8	853.7	848.6	878.6	900.1	928.8	882.3	893.8	872.2	867.5	866.6	886.8	767.7
16.....	919.4	864.6	851.4	862.2	880.5	910.7	897.4	848.4	842.8	828.6	843.1	823.8	864.4	755.
17.....	844.2	825.5	813.7	795.3	831.	845.	852.	825.4	811.3	839.5	835.5	835.3	827.7	738.3
18.....	930.8	818.4	816.2	840.1	890.8	1015.2	960.1	855.	908.2	899.8	912.3	874.4	894.2	793.6
19.....	927.8	947.3	906.4	842.7	881.	899.5	939.	1025.5	933.6	861.7	813.6	842.	901.7	829.1
20.....	834.5	894.7	870.4	820.3	866.7	909.4	893.9	844.9	911.7	873.4	898.4	836.8	855.6	773.4
21.....	880.8	846.4	877.5	853.6	883.9	927.6	877.9	864.3	878.7	868.9	890.9	851.3	875.1	773.7
22.....	857.5	805.4	838.	860.5	861.4	913.8	885.5	852.2	859.2	864.2	870.	824.5	857.3	757.8
23.....	852.1	831.9	831.2	828.3	875.2	897.	852.7	832.5	860.6	863.	884.1	849.5	852.3	754.1
24.....	831.3	844.7	815.7	812.9	809.3	848.9	838.7	825.5	905.4	837.	854.4	827.1	829.3	741.
25.....	822.2	808.7	800.2	800.3	798.2	841.8	858.5	855.3	814.8	831.8	871.9	858.3	830.2	741.2
26.....	850.	816.1	799.	799.8	830.2	868.3	855.3	832.	835.6	892.1	906.7	857.9	845.2	748.2
Means.....	851.9	839.1	832.9	827.6	839.3	892.3	876.8	853.8	850.6	851.9	854.2	849.2	853.32	.....
Reduced to 32° F.	748.9	736.	735.9	732.6	761.1	732.8	771.5	742.4	735.	736.7	741.6	739.6	.....	747.85

As before.

NOTE.—The observed numbers from the 1st day to the 23d, at 12h. 22m., inclusive, have been corrected. On the 23d, the instrument was readjusted. See note to horizontal force for August, 1840, p. 20.

[1840.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

SEPTEMBER.]

Clöttingen time..... Observatory time.....	h. m. 6 02½ 0 22	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	Mean.
Sept. 1.....	74.9	73.7	69.9	70.2	71.4	71.2	72.	73.8	75.	75.	73.6	73.2	73.7
2.....	70.6	69.	68.	67.8	69.8	70.5	74.2.	75.8	78.	78.6	77.5	76.4	73.
3.....	74.3	73.1	71.9	70.7	70.	69.3	70.	70.5	70.5	70.	68.9	68.	70.6
4.....	66.4	65.3	63.5	62.9	63.1	63.	63.6	64.5	65.3	64.7	64.4	63.4	64.2
5.....	63.5	62.5	62.	61.8	61.8	61.9	62.2	62.6	62.4	62.4	61.6	61.2	62.2
6.....	65.6	63.9	62.8	62.4	63.8	65.6	68.5	70.3	73.8	73.5	72.	71.4	68.
7.....	69.5	67.7	66.	65.6	66.	67.	70.	71.7	74.	73.7	73.2	70.8	69.6
8.....	69.6	68.3.	67.9	67.3	68.	69.	70.5	72.	74.6	73.8	73.4	73.3	70.6
9.....	71.9	71.1	69.4	70.3	70.6	71.5	73.	73.5	73.1	71.6	70.2	69.	71.3
10.....	67.2	65.5	64.	63.2	66.	64.8	65.	65.3	75.6	74.5	73.5	73.1	68.1
11.....	60.9	59.2	57.6	56.9	60.	59.	60.	60.8	61.9	62.5	62.	60.8	60.1
12.....	60.9	59.9	58.6	57.5	61.4	61.	63.	65.	67.	68.	66.8	65.7	63.8
14.....	64.2	61.9	60.2	59.	62.5	63.	66.5	69.	71.9	72.	71.	69.4	65.9
15.....	68.1	66.9	65.6	64.3	66.	66.5	69.	71.5	75.	74.9	73.7	72.6	69.5
16.....	70.1	68.	66.4	65.8	66.	66.5	69.5	71.	72.3	71.5	70.3	70.	68.9
17.....	69.	68.6	68.2	68.	67.9	67.4	68.5	68.6	64.5	63.5	62.8	62.3	66.2
18.....	61.6	60.6	59.6	59.2	60.5	60.5	62.	63.	63.5	63.2	62.8	62.	61.6
19.....	63.8	62.3	61.1	60.5	60.5	59.5	59.7	60.	60.3	59.8	59.	57.7	60.3
21.....	55.5	53.7	52.6	51.7	52.5	52.3	53.	54.3	57.9	57.8	57.5	56.	54.7
22.....	54.	52.9	51.5	51.5	53.	54.	57.5	60.5	63.9	65.	64.9	64.	57.7
23.....	63.	61.9	60.6	60.1	60.	61.2	64.	66.5	68.1	67.2	66.6	65.1	62.7
24.....	62.7	61.2	60.	59.1	59.5	61.	64.	65.5	67.2	66.7	65.6	64.6	63.1
25.....	62.4	60.7	59.1	57.7	59.	59.3	62.	65.5	66.3	66.5	65.6	64.4	62.7
26.....	60.4	59.	57.5	56.2	55.4	56.9	59.2	65.	62.	61.2	61.5	60.6	59.6
28.....	59.	57.8	56.3	55.1	56.3	57.5	60.	62.3	64.	63.9	63.	62.4	60.8
29.....	60.2	59.1	58.3	57.8	59.8	60.	62.	64.	64.	66.9	66.8	66.6	63.8
30.....													
Means.....	64.2	63.6	62.3	61.7	62.7	62.1	64.9	68.8	68.2	68.	67.3	66.2	64.96

Degrees Fahrenheit.

Sept. 1.....

TRIPLE OBSERVATIONS.

[1940.]

[97]

28

Göttingen time. Observatory time.	Declination.			Vertical force.			Horizontal force.			Tempera- ture Fahr- renheit.
	h. m. 13 52½ 8 12	h. m. 14 00 8 19½	h. m. 14 07½ 8 27	h. m. 13 50 8 09½	h. m. 13 57½ 8 17	h. m. 14 05 8 24½	h. m. 13 55 8 14½	h. m. 14 02½ 8 22	h. m. 14 10 8 29½	
Sept. 1.....	499.4	500.	501.4	— 7.7	— 10.7	— 16.4	836.6	842.4	837.7	71.3
2.....	508.2	508.5	508.1	13.1	82.5	10.2	871.4	873.8	883.3	69.8
3.....	510.1	512.2	510.7	— 9.1	0.4	— 3.5	877.4	883.1	886.3	70.
4.....	508.3	508.5	507.5	231.	191.	200.6	847.8	848.3	851.8	63.1
5.....	516.5	509.7	508.7	256.5	238.3	267.2	852.4	856.1	868.4	61.8
6.....	506.5	506.2	507.	149.4	148.2	144.3	863.9	867.8	865.7	65.7
7.....	510.	507.3	506.3	131.2	107.7	167.	860.9	860.8	862.8	66.
8.....	507.	506.3	505.6	108.3	97.3	104.6	869.6	871.9	873.9	68.
9.....	513.4	512.1	511.5	93.8	49.1	86.6	894.3	898.7	901.2	70.6
10.....	508.1	508.	504.8	93.6	87.2	122.3	854.5	856.6	861.8	66.
11.....	503.	503.2	504.3	248.1	262.8	238.6	835.	824.9	827.2	60.
12.....	513.	507.3	507.	174.3	210.5	195.3	844.8	848.1	850.	61.4
13.....	506.	506.1	506.	129.7	137.2	169.2	855.7	858.5	860.9	62.5
14.....	505.3	504.3	503.5	124.4	101.2	75.9	875.3	876.9	876.7	65.
15.....	505.1	504.7	503.2	46.5	38.	33.6	874.1	876.6	878.	65.
16.....	495.8	494.6	494.	52.9	48.9	63.5	876.6	880.5	880.6	67.8
17.....	493.8	493.8	493.4	259.2	238.4	260.6	813.0	821.	822.1	60.5
18.....	491.1	487.3	483.	162.6	174.6	176.9	876.4	890.8	907.5	60.5
19.....	498.4	481.9	480.3	372.8	336.5	360.5	882.2	881.	898.4	52.5
20.....	491.6	492.1	488.3	361.5	532.2	495.	858.2	866.7	875.1	53.
21.....	.....	489.1	.....	.....	156.1	.....	.....	883.9	.....	60.
22.....	483.5	480.8	479.9	196.4	239.9	245.8	858.4	861.4	861.4	59.5
23.....	496.4	492.9	490.4	394.4	303.3	269.5	877.2	875.2	878.	59.
24.....	498.9	497.7	496.9	367.	349.1	367.9	809.8	809.2	810.7	56.4
25.....	498.5	498.5	490.	307.4	385.1	351.4	795.	796.2	798.6	56.3
26.....	502.	500.4	499.9	343.4	311.6	301.1	838.	830.2	831.8	59.8

October 2.]

VERTICAL FORCE MAGNETOMETER.

[1840.]

[97.]

30.

Göttingen time... Observatory time.	<i>h. m.</i> 5 57½ 0 17	<i>h. m.</i> 7 57½ 2 17	<i>h. m.</i> 9 57½ 4 17	<i>h. m.</i> 11 57½ 6 17	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 15 57½ 10 17	<i>h. m.</i> 17 57½ 12 17	<i>h. m.</i> 19 57½ 14 17	<i>h. m.</i> 21 57½ 16 17	<i>h. m.</i> 23 57½ 18 17	<i>h. m.</i> 1 57½ 20 17	<i>h. m.</i> 3 57½ 22 17	Means.	Reduced to 32° F.
Oct. 1.....	47.7	69.4	25.3	81.3	99.3	96.1	103.2	119.	76.9	83.	89.7	18.9	76.	189.5
2.....	107.	110.3	78.5	155.9	144.3	204.6	125.4	242.7	226.4	172.5	198.7	208.1	164.6	276.6
3.....	235.3	200.3	193.1	141.1	201.6	119.4	60.2	156.1	110.5	194.3	258.5	273.2	178.5	289.
5.....	395.9	398.5	424.4	455.4	450.3	410.1	334.6	254.1	209.8	183.3	191.2	268.9	330.5	416.9
6.....	248.1	241.	291.1	365.7	301.9	347.8	272.8	137.1	51.8	59.2	113.4	172.4	216.9	314.2
7.....	108.2	186.1	238.8	292.6	230.8	172.5	70.3	69.7	—	44.2	108.1	126.7	134.4	241.4
8.....	259.6	203.7	260.1	208.3	256.3	191.2	189.4	95.	73.7	57.3	38.6	151.	165.3	269.5
9.....	177.1	205.2	241.4	305.2	240.5	202.3	116.3	103.6	22.9	0.6	47.3	71.9	144.5	252.2
10.....	108.7	131.	165.3	195.4	230.4	253.5	180.	303.6	256.8	329.	327.9	311.2	232.8	329.5
12.....	251.3	175.3	246.3	173.1	211.	138.6	107.3	135.	121.5	121.5	150.	226.1	170.6	277.3
13.....	286.3	317.9	350.8	420.8	362.9	348.2	282.9	221.1	185.7	142.0	174.5	215.9	275.8	361.9
14.....	261.8	340.5	379.4	417.3	410.9	357.9	268.	144.7	66.9	70.9	98.	122.1	244.9	334.8
15.....	134.1	148.7	249.2	236.	243.9	207.9	172.7	236.4	217.5	216.2	243.	298.6	217.	307.5
16.....	332.5	365.4	448.3	485.6	452.8	414	370.	346.	314.2	311.7	355.3	492.9	392.4	462.
17.....	347.7	410.7	485.6	531.	545.3	490.8	489.9	538.4	530.9	530.6	477.2	447.7	485.5	541.
19.....	370.5	245.4	303.7	283.9	263.2	278.6	328.8	337.6	282.3	38.4	4.4	—	222.5	319.5
20.....	— 76.8	— 112.	— 91.8	5.2	— 74.3	— 27.9	— 41.3	— 11.5	23.8	— 19.	— 37.9	— 85.8	— 45.8	61.
21.....	— 92.7	— 115.9	— 73.5	— 94.6	36.6	63.4	133.4	193.6	186.4	133.3	31.2	— 83.1	26.5	127.9
22.....	— 105.1	— 127.3	— 127.2	— 58.1	— 51.1	71.5	124.8	89.4	111.2	*	127.3	127.7	16.6	107.4
23.....	105.9	168.8	201.	333.7	327.1	280.2	423.7	184.7	110.5	63.9	85.4	112.7	183.1	257.4
24.....	130.3	81.2	140.6	186.4	169.	145.9	131.4	128.2	97.5	114.5	161.9	155.4	136.	211.2
26.....	498.3	495.	540.	585.4	591.3	519.1	475.	466.3	468.7	476.1	491.1	482.	505.7	536.3
27.....	514.9	532.1	539.7	622.8	526.3	477.9	421.1	365.8	302.5	381.5	432.4	336.1	448.6	484.5
28.....	312.1	183.1	172.9	372.9	436.5	416.4	369.3	317.6	230.3	280.2	217.8	205.1	290.3	339.9
29.....	193.9	172.7	132.	197.8	222.1	212.3	213.7	226.6	219.3	191.3	318.1	333.2	219.4	294.3
30.....	276.5	241.2	239.5	274.2	280.6	263.5	302.	303.2	333.6	359.5	561.7	428.	305.3	401.7
31.....	452.8	482.8	524.6	546.3	601.7	569.9	551.2	519.6	539.5	545.9	569.7	623.	543.9	612.6
Means.....	217.3	213.7	243.7	288.	295.8	267.7	236.2	239.7	195.4	194.7	208.7	222.7	233.38	.....
Reduced to 32° F.	305.6	298.5	326.	363.2	366.6	349.1	390.7	318.	266.1	268.	300.8	312.3	.....	319.88

* Seventeen minutes late, 181.3.

As before.

1940.

THERMOMETER OF VERTICAL FOROM MAGNETOMETER.

Отсюда.]

Gezeiten time	A. m. 0 57½ 0 17	A. m. 7 57½ 2 17	A. m. 9 57½ 4 17	A. m. 11 57½ 6 17	A. m. 13 57½ 8 17	A. m. 15 57½ 10 17	A. m. 17 57½ 12 17	A. m. 19 57½ 14 17	A. m. 21 57½ 16 17	A. m. 23 57½ 18 17	A. m. 1 57½ 20 17	A. m. 3 57½ 22 17	Means.
Oct. 1	67.	66.7	66.2	65.8	66.5	66.7	64.	69.2	71.	71.8	71.	70.4	68.4
2	69.7	69.8	68.	67.5	66.	66.5	66.8	67.	67.5	68.	68.	68.	67.6
3	68.	68.	68.	67.9	68.4	68.6	68.8	67.5	67.7	65.8	64.	62.3	67.1
4	68.5	67.3	58.	55.	56.	57.	59.	61.	64.3	66.	64.5	63.4	69.7
5	63.	60.8	59.5	56.2	59.1	59.6	62.	64.5	67.9	69.1	68.4	67.5	63.2
6	66.3	65.	63.8	62.6	63.5	64.2	67.	68.5	70.4	69.	68.4	67.	66.3
7	65.5	63.8	63.7	62.3	61.8	63.	65.	66.7	69.	69.	68.4	66.7	65.4
8	64.	63.	63.7	62.8	63.	64.	67.	68.7	70.1	70.7	70.5	69.6	66.5
9	65.	64.	65.8	64.2	63.3	62.	61.	61.	61.6	61.1	60.7	60.3	63.
10	68.2	67.	65.8	64.2	63.3	62.	61.	61.	61.6	61.1	60.7	60.3	63.
11	65.8	65.8	66.	65.	66.	67.	67.5	68.	68.1	67.	66.	63.4	66.2
12	61.4	59.4	57.3	56.	57.	57.5	58.4	60.	62.4	63.1	62.2	61.	59.6
13	59.4	57.7	56.7	56.	56.4	57.3	60.	63.4	68.	66.1	65.6	65.	60.8
14	64.	63.8	63.2	61.	60.	59.	59.8	60.4	61.4	60.	60.	57.7	61.
15	56.	54.3	52.4	51.	52.2	52.5	53.8	55.	56.6	56.8	56.1	54.4	54.3
16	50.7	49.	48.	47.	47.	47.3	48.	49.	50.	51.2	52.	52.	49.8
17	53.2	50.7	49.	48.	47.	47.3	48.	49.	50.	51.2	52.	52.	49.8
18	57.3	56.3	55.1	53.9	52.8	52.	53.5	55.4	67.	68.	68.2	68.	63.1
19	67.3	67.1	66.9	66.9	67.	67.	67.	67.2	67.4	67.5	67.7	67.2	67.2
20	67.3	66.1	65.7	65.	64.	63.2	63.	62.8	62.5	64.	65.	65.5	64.5
21	66.	66.	65.	65.	64.	63.2	63.	62.8	62.5	64.	65.	65.5	64.5
22	66.	66.	65.	65.	64.	63.2	63.	62.8	62.5	64.	65.	65.5	64.5
23	66.	66.	65.	65.	64.	63.2	63.	62.8	62.5	64.	65.	65.5	64.5
24	66.	66.	65.	65.	64.	63.2	63.	62.8	62.5	64.	65.	65.5	64.5
25	66.	66.	65.	65.	64.	63.2	63.	62.8	62.5	64.	65.	65.5	64.5
26	66.	66.	65.	65.	64.	63.2	63.	62.8	62.5	64.	65.	65.5	64.5
27	66.	66.	65.	65.	64.	63.2	63.	62.8	62.5	64.	65.	65.5	64.5
28	66.	66.	65.	65.	64.	63.2	63.	62.8	62.5	64.	65.	65.5	64.5
29	66.	66.	65.	65.	64.	63.2	63.	62.8	62.5	64.	65.	65.5	64.5
30	66.	66.	65.	65.	64.	63.2	63.	62.8	62.5	64.	65.	65.5	64.5
31	66.	66.	65.	65.	64.	63.2	63.	62.8	62.5	64.	65.	65.5	64.5
Means	60.3	59.3	58.4	57.7	57.9	58.1	59.1	60.3	61.7	61.9	61.5	60.7	59.74

Degrees Fahrenheit.

Göttingen time. Observatory time.	h. m. 0 23	h. m. 8 02½	h. m. 10 02½	h. m. 12 02½	h. m. 14 02½	h. m. 16 02½	h. m. 18 02½	h. m. 20 02½	h. m. 22 02½	h. m. 0 02½	h. m. 2 02½	h. m. 4 02½	Means.	Reduced to 32° F.
Oct. 1.....	803.3	879.7	885.2	853.	856.4	885.7	873.3	864.	870.2	871.4	870.7	864.9	865.6	750.7
2.....	857.4	837.2	884.5	832.6	855.	887.7	875.9	876.8	857.2	840.7	850.3	856.	855.1	743.1
3.....	844.9	839.	883.6	835.2	858.2	885.6	873.	844.4	851.5	830.4	814.2	814.	843.2	783.8
5.....	796.6	789.1	781.5	790.	789.3	827.7	829.2	798.4	809.8	811.7	811.8	808.	803.6	718.2
6.....	807.7	808.	805.7	797.3	838.6	869.4	859.8	863.9	861.2	845.1	872.1	857.2	840.5	743.2
7.....	850.9	835.9	829.1	852.3	829.4	841.6	837.3	837.8	840.6	848.2	849.2	835.	840.6	733.7
8.....	832.8	822.1	814.8	815.7	832.	849.3	843.2	838.1	851.	838.9	839.7	837.8	834.2	729.2
9.....	823.3	821.4	821.	819.3	840.6	867.5	854.8	844.2	*844.8	840.9	842.3	828.7	837.4	729.2
10.....	830.1	806.9	809.5	808.	845.3	848.9	810.	787.4	829.3	839.9	826.4	825.5	821.4	724.4
12.....	839.5	838.3	833.4	854.8	891.	899.8	877.8	874.4	868.3	871.7	868.7	855.1	864.4	757.8
13.....	842.8	832.7	827.5	831.4	825.3	837.1	822.8	824.5	835.7	831.7	833.1	827.8	831.	746.2
14.....	827.4	820.8	810.4	811.8	821.2	827.3	825.7	821.8	821.6	828.4	790.3	824.5	822.7	732.5
15.....	821.1	813.4	816.6	811.	831.2	833.3	833.	827.2	799.4	790.	790.3	784.7	812.7	723.7
16.....	774.9	768.6	760.3	775.	794.5	824.	840.8	841.8	808.1	808.8	828.8	800.2	802.1	730.4
17.....	789.5	799.9	774.9	770.6	778.5	816.3	823.	831.6	799.5	845.1	831.	887.4	812.3	759.5
19.....	†847.8	827.2	.....	813.6	840.6	900.5	923.1	915.9	901.3	955.3	959.9	865.6	890.	791.1
20.....	884.8	896.5	854.3	889.9	909.2	878.8	915.6	897.4	946.8	924.9	891.5	830.4	890.8	781.
21.....	870.7	875.	868.8	891.	868.8	919.4	900.3	872.2	897.7	893.9	890.8	830.4	880.8	780.3
22.....	876.2	868.5	853.6	840.4	848.7	931.6	897.1	862.3	868.5	831.6	821.7	851.6	861.	770.4
23.....	849.	850.6	803.3	802.9	827.	856.4	855.8	867.8	849.8	835.7	840.6	847.1	843.	769.7
24.....	838.5	824.2	816.6	824.7	818.2	847.6	859.5	837.6	817.1	824.9	817.1	829.8	829.6	757.6
25.....	877.	755.5	783.	785.1	797.6	828.5	821.2	804.2	796.2	791.4	790.2	796.3	797.2	769.4
26.....	785.7	779.4	763.9	778.2	777.8	807.9	806.	786.4	780.7	845.8	869.6	†850.	802.6	770.3
27.....	894.5	880.3	831.1	805.2	828.6	859.7	870.8	831.3	841.8	873.9	866.8	852.5	852.3	804.9
28.....	841.2	839.	848.	834.1	857.	890.8	917.8	902.	855.8	852.	861.2	864.1	863.6	789.4
29.....	880.4	910.5	876.1	865.7	875.8	906.7	910.8	870.4	846.8	841.2	845.	846.3	872.9	778.2
30.....	850.	836.4	825.8	802.9	822.2	839.2	858.7	832.3	816.2	815.8	822.	844.6	830.5	765.5
31.....	837.3	832.8	819.4	821.2	834.9	861.8	862.	846.3	842.8	845.2	845.2	837.9	840.94	.....
Means.....	750.3	748.6	738.1	742.5	755.2	780.5	777.2	758.3	751.	751.8	753.8	749.9	.....	754.82

As before. * Three minutes late. † Four minutes late. ‡ Twelve and a half minutes before this, observation 892.7, and three minutes after it, observation 868.7.

[1840.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

Octob. 1.]

Göttingen time...	A. m. 6 03½	A. m. 8 03½	A. m. 10 03½	A. m. 12 03½	A. m. 14 03½	A. m. 16 03½	A. m. 18 03½	A. m. 20 03½	A. m. 22 03½	A. m. 24 03½	A. m. 26 03½	A. m. 28 03½	A. m. 30 03½	A. m. 32 03½	Means.
Observatory time.	0 23	2 23	4 23	6 23	8 23	10 23	12 23	14 23	16 23	18 23	20 23	22 23	24 23	26 23	
Oct. 1.....	66.3	66.6	65.6	65.1	66.	66.4	67.8	69.	70.9	71.2	70.8	70.3	70.3	67.9	
2.....	69.	68.1	67.4	67.1	68.	66.	66.3	66.5	66.8	66.9	67.	67.3	67.3	67.	
3.....	67.3	67.2	67.1	67.	68.	66.3	66.	66.8	66.8	66.9	67.	67.3	67.3	67.	
4.....	67.8	66.5	65.	63.9	64.3	66.	66.3	66.5	63.	63.9	63.3	63.5	63.5	63.7	
5.....	61.	60.1	58.6	57.2	58.3	59.	61.4	64.	67.3	68.	67.3	66.5	66.5	62.4	
6.....	65.6	64.	63.7	61.1	63.5	63.5	66.3	68.	69.5	68.2	67.3	66.3	66.3	65.4	
7.....	64.6	63.8	61.9	61.3	61.3	67.8	64.4	66.	67.8	67.7	67.	65.7	65.7	64.8	
8.....	64.2	63.	63.	61.9	63.	63.3	66.	68.	70.	70.	70.	68.8	68.8	66.8	
9.....	67.7	66.3	65.	63.2	63.5	61.4	66.5	60.5	60.3	66.	60.	59.9	59.9	62.3	
10.....	65.1	65.	64.5	64.3	65.	66.	67.	67.4	66.8	65.6	64.2	63.3	63.3	65.3	
11.....	60.3	58.3	56.8	55.	56.5	56.2	57.	59.3	61.	61.5	60.8	60.	60.	58.5	
12.....	58.2	56.8	55.5	54.8	55.5	56.6	64.3	63.1	65.	65.	64.4	64.	64.	60.3	
13.....	63.	62.1	61.	60.1	59.	58.6	59.	59.5	60.	59.8	58.6	56.4	56.4	59.8	
14.....	54.8	53.9	51.	49.4	51.	51.	52.3	53.6	54.9	55.1	54.3	53.	53.	52.7	
15.....	59.9	49.	47.7	46.2	46.	46.5	47.	48.4	49.	49.5	50.5	51.	51.	48.5	
16.....	57.	57.9	....	58.9	59.3	60.8	63.5	65.5	66.8	67.	67.	66.8	66.8	62.9	
17.....	66.4	66.	66.9	65.9	68.1	66.5	66.7	67.	67.	65.2	66.6	66.3	66.3	66.3	
18.....	65.7	65.1	64.8	64.	63.5	62.7	63.3	63.3	63.	63.6	63.	63.	63.	63.4	
19.....	63.5	63.5	63.	61.5	60.4	59.3	58.6	58.6	59.	63.4	57.8	55.3	55.3	60.3	
20.....	59.4	53.1	51.	50.	51.5	53.2	54.3	57.	59.4	60.	59.5	59.	59.	54.9	
21.....	58.1	56.8	54.9	53.	53.3	53.1	53.3	54.3	55.	55.	54.	53.5	53.5	54.5	
22.....	42.	41.8	39.4	38.2	38.3	39.3	40.	41.5	42.	42.5	41.5	41.5	41.5	40.7	
23.....	40.5	39.9	39.	38.2	38.3	40.	42.	44.	46.	46.	45.5	45.	45.	43.1	
24.....	44.5	44.	43.5	43.1	43.9	44.	45.8	48.	51.	51.3	51.5	52.	52.	46.8	
25.....	51.9	52.	51.9	52.	52.	53.	54.	56.	57.5	59.4	61.	62.	62.	55.2	
26.....	62.8	63.3	63.4	63.	63.	62.4	62.	61.8	61.	60.5	59.	57.5	57.5	61.6	
27.....	56.1	54.8	53.3	53.	51.3	51.	51.4	53.	53.5	53.	51.	51.	51.	53.3	
28.....	59.2	58.3	57.4	56.6	56.9	57.4	58.5	59.5	60.7	60.8	60.3	59.5	59.5	58.7	
Means.....	59.2	58.3	57.4	56.6	56.9	57.4	58.5	59.5	60.7	60.8	60.3	59.5	59.5	58.7	

Degrees Fahrenheit.

October.]

TRIPLE OBSERVATIONS.

[1840.

[97]

34

	Declination.			Vertical force.				Horizontal force.				Tempera- ture Fahr- renheit.
	h. m. 13 52½ 8 12	h. m. 14 00 8 19½	h. m. 14 07½ 8 27	h. m. 13 50 8 09½	h. m. 13 57½ 8 17	h. m. 14 05 8 24½	Tempera- ture Fahr- renheit.	h. m. 13 55 8 14½	h. m. 14 02½ 8 22	h. m. 14 10 8 29½		
Göttingen time.....	494.1	494.9	494.7	127.5	99.3	114.2	66.5	853.5	856.4	857.1	66.	
Observatory time....	486.1	487.6	488.2	229.1	144.3	253.7	66.	851.8	855.	856.8	66.	
Oct. 1.....	497.	497.	496.7	178.1	201.6	216.1	68.4	849.2	853.2	857.8	68.	
2.....	501.1	501.6	500.6	454.	450.3	449.7	56.	787.8	789.3	790.1	54.2	
3.....	488.	487.3	487.3	419.9	301.9	344.3	59.1	837.5	838.6	838.1	58.3	
4.....	494.7	494.5	495.6	260.5	330.8	277.2	63.5	831.1	839.4	830.5	62.5	
5.....	495.6	495.	494.	294.	256.3	364.1	61.8	831.5	832.	832.8	61.2	
6.....	497.4	493.3	497.2	339.9	240.5	375.6	63.	837.3	840.6	844.8	62.	
7.....	500.	500.6	499.4	251.6	236.4	283.1	63.8	842.8	846.3	846.6	62.5	
8.....	498.4	498.5	498.2	162.7	211.	192.9	66.	888.7	891.	892.4	65.	
9.....	506.	506.	506.3	365.5	362.9	356.1	57.	825.5	826.3	824.8	56.5	
10.....	502.7	503.6	503.2	416.8	410.9	404.5	56.4	821.4	821.2	826.	55.5	
11.....	504.	504.7	505.8	243.9	243.9	236.2	60.	828.6	831.2	831.7	59.	
12.....	487.4	488.3	489.6	456.2	452.8	449.4	52.2	795.2	794.5	797.	51.	
13.....	502.9	502.	503.2	540.1	546.3	542.5	47.	783.1	778.6	784.3	46.	
14.....	489.6	492.	494.3	293.2	263.2	249.8	60.7	831.2	840.6	839.2	60.2	
15.....	476.	463.5	468.8	.....	74.3	.....	67.	831.4	909.2	909.6	66.1
16.....	476.	477.6	478.	40.4	36.6	39.	64.	854.3	858.5	859.9	63.5	
17.....	483.6	484.8	483.7	.....	51.1	.....	63.7	.....	846.7	.....	60.4
18.....	483.6	482.6	483.7	390.8	327.1	309.3	52.8	828.	827.	824.5	51.5	
19.....	476.5	476.8	476.	174.5	169.	167.	55.	817.4	816.2	819.5	53.3	
20.....	486.6	485.6	485.	571.4	591.3	579.3	39.2	799.9	797.6	800.3	38.3	
21.....	489.5	489.1	487.7	546.2	526.3	533.8	40.4	776.7	777.8	781.8	39.5	
22.....	476.4	476.9	475.	453.2	436.5	435.6	44.	841.1	838.6	838.	42.9	
23.....	489.3	488.9	489.7	214.4	222.1	214.5	53.	854.2	857.	861.	52.	
24.....	484.9	485.4	485.	272.	280.6	271.5	63.6	874.7	875.9	879.	63.	
25.....	482.1	482.4	483.5	593.1	601.7	591.7	52.5	823.9	822.2	820.1	51.9	

[1940.]

DECLINATION MAGNETOMETER.

NOVEMBER.]

Giittingen time. Observatory time.	A. m. 6 00 0 19½	A. m. 8 00 3 19½	A. m. 10 00 4 19½	A. m. 12 00 6 19½	A. m. 14 00 8 19½	A. m. 16 00 10 19½	A. m. 18 00 12 19½	A. m. 20 00 14 19½	A. m. 22 00 16 19½	A. m. 0 00 18 19½	A. m. 2 00 20 19½	A. m. 4 00 22 19½	Mean.
Nov. 2.....	481.7	481.3	482.	476.9	484.5	486.7	471.6	474.1	478.4	478.6	481.5	479.9	479.7
3.....	478.4	479.7	481.2	481.4	488.1	480.	475.5	473.1	474.7	478.1	480.1	480.4	479.1
4.....	480.1	480.9	481.8	483.3	482.7	478.9	477.	471.8	476.6	479.3	480.	483.	479.6
5.....	480.4	479.6	487.9	485.4	485.7	478.7	473.5	474.1	477.9	485.5	484.3	483.9	481.3
6.....	480.	488.	491.4	494.3	493.	482.2	477.4	473.4	473.9	480.3	483.5	480.5	483.9
7.....	480.4	482.9	486.7	486.4	491.5	484.2	468.5	474.5	474.6	483.1	485.1	485.	481.4
9.....	483.6	496.2	496.1	494.9	489.2	483.6	475.	474.7	476.4	483.9	485.5	485.5	485.3
10.....	482.7	483.1	484.4	486.	491.2	487.	478.5	478.1	481.5	481.2	484.	481.6	483.3
11.....	483.4	484.1	483.2	486.3	491.2	485.5	478.	477.3	480.7	485.9	483.3	483.4	483.3
12.....	480.3	482.7	484.4	486.3	489.2	486.2	478.	478.3	481.9	481.	483.	482.7	482.7
13.....	481.9	482.4	483.4	487.2	483.8	484.	476.2	471.3	477.4	474.3	484.	486.1	480.9
14.....	479.	478.7	475.9	478.5	486.	471.5	475.	489.4	474.2	482.7	484.	489.9	479.6
16.....	480.1	474.5	482.9	482.9	481.	463.	472.4	473.7	480.6	486.8	488.1	487.8	482.
17.....	484.4	478.5	480.4	484.3	483.7	483.9	472.4	473.7	480.6	486.8	488.1	487.8	482.
18.....	482.	483.1	483.5	485.9	489.8	476.	471.6	474.4	479.9	480.9	483.3	485.1	481.2
19.....	483.7	481.3	481.2	483.6	485.5	476.	476.7	478.6	478.1	481.7	483.3	484.1	481.5
20.....	481.	484.	486.1	485.1	486.	466.8	461.5	466.3	477.2	471.	516.6	478.	480.
21.....	458.5	479.6	443.7	471.3	482.8	467.4	474.3	468.3	474.	477.2	478.3	480.3	471.3
23.....	.....	.....	.....	.....	.....	.....	448.1	452.6	457.1	464.8	464.3	460.7	459.
24.....	463.8	454.8	465.7	461.4	480.1	460.1	446.8	451.4	460.4	461.2	462.4	460.6	459.1
25.....	466.2	457.8	460.8	462.8	463.1	461.6	454.3	450.2	458.	461.9	471.7	476.	460.9
26.....	459.7	469.9	461.7	462.3	464.4	461.7	453.1	461.	459.	455.5	469.8	465.3	459.5
27.....	460.2	458.5	460.7	461.5	.....	.....	454.	.....	454.	456.9	463.4	460.3	459.4
28.....	459.7	462.5	467.3	465.6	466.4	454.4	453.5	449.2	*457.8	461.1	463.9	460.3	460.1
30.....	461.8	459.6	463.	462.	463.7	459.9	453.2	454.	457.2	461.9	461.1	458.8	459.5
Mean.....	475.3	476.4	477.2	479.3	481.7	474.9	468.3	468.	473.	476.1	479.	478.	475.5

As before.

* Five minutes before time.

[1940.]

VERTICAL FORCE MAGNETOMETER.

NOVEMBER.]

Göttingen time. Observatory time	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 25 57½ 20 17	h. m. 27 57½ 22 17	Means.	Reduced to 32° F.
Nov. 2.....	632.8	674.2	697.5	721.8	709.7	679.1	654.	621.7	578.5	552.8	591.8	614.6	644.	701.4
3.....	633.6	670.1	697.5	729.8	705.8	678.5	597.5	547.6	509.4	534.9	548.3	559.3	617.7	678.9
4.....	570.2	601.2	630.9	631.5	624.3	561.9	538.9	464.9	408.6	248.6	288.4	308.7	489.4	558.4
5.....	304.4	359.5	398.4	429.2	445.1	420.7	357.2	331.2	273.	256.3	291.	332.2	349.8	418.8
6.....	333.9	384.5	398.4	400.9	427.7	373.4	343.9	342.	393.7	425.8	364.	355.1	377.8	446.5
7.....	382.5	374.9	372.8	408.6	410.5	383.	361.8	317.5	321.7	347.4	384.	345.	361.6	429.
9.....	451.1	404.3	421.8	394.5	383.8	388.7	432.2	465.2	479.6	510.9	515.	467.	442.8	508.
10.....	458.5	475.2	473.7	491.	469.8	423.9	395.3	407.	383.4	359.6	395.	391.2	427.	490.3
11.....	422.7	439.2	471.5	506.4	476.8	462.3	422.	402.9	341.6	358.1	347.9	370.6	418.5	476.6
12.....	403.5	411.6	420.6	429.2	421.5	380.	376.1	346.7	247.2	225.5	266.5	286.	351.2	416.4
13.....	*	324.2	363.4	386.5	426.1	348.9	296.3	271.5	253.2	327.7	435.6	392.9	347.9	412.7
14.....	404.7	431.2	435.5	476.	531.3	449.9	415.6	387.3	407.7	383.4	408.4	427.4	429.9	485.1
16.....	598.	515.3	597.2	597.2	602.8	635.7	608.3	666.7	617.4	585.8	636.6	654.4	596.7	632.7
17.....	615.6	592.7	708.1	725.2	755.8	704.	650.	654.4	637.1	621.9	593.9	570.3	652.4	689.3
18.....	603.8	605.4	537.7	642.8	662.	708.3	673.4	684.1	698.4	687.4	679.7	699.6	655.9	688.1
19.....	759.4	740.5	738.6	743.1	730.8	704.1	670.9	706.9	721.	679.9	640.6	687.2	709.4	736.3
20.....	688.	647.5	696.5	683.	673.4	650.2	640.9	596.4	593.5	591.6	689.5	621.5	636.8	671.4
21.....	499.	555.9	398.	484.	742.1	777.	773.7	856.	828.	685.4	886.8	648.1	661.6	693.1
23.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24.....	210.4	238.4	290.7	311.8	330.7	294.3	258.7	243.8	209.8	195.8	225.9	239.5	254.1	308.
25.....	264.7	332.5	339.4	358.7	389.6	372.	373.9	386.7	362.7	344.4	352.4	341.2	351.5	397.7
26.....	.....	364.9	381.6	385.3	367.2	371.2	340.2	350.4	357.9	367.9	372.7	385.4	387.5	408.1
27.....	392.9	414.7	437.	467.	.....	.....	.....	.....	456.5	377.9	394.6	401.7	409.	443.9
28.....	384.5	383.9	368.2	379.4	435.5	423.8	392.4	375.1	259.1	380.1	346.6	304.2	366.1	404.1
30.....	309.4	300.5	284.9	261.4	293.4	277.	241.9	222.2	176.5	136.2	113.9	138.4	230.7	286.5
Means.....	465.3	468.4	475.4	501.9	522.4	498.6	470.4	463.	438.1	422.2	431.	441.7	466.34	.....
Reduced to 32° F.	517.4	518.6	523.1	548.1	568.3	545.4	530.6	516.9	492.7	479.	486.5	495.	.....	517.41

As before.

* Twenty-five minutes late, observation 290 2

[1840.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

November.]

Observatory time.....	A. m. 5 57½ 0 17	A. m. 7 57½ 2 17	A. m. 9 57½ 4 17	A. m. 11 57½ 6 17	A. m. 13 57½ 8 17	A. m. 15 57½ 10 17	A. m. 17 57½ 12 17	A. m. 19 57½ 14 17	A. m. 21 57½ 16 17	A. m. 23 57½ 18 17	A. m. 1 57½ 20 17	A. m. 3 57½ 22 17	Means.
Nov. 3.....	50.8	50.	48.8	47.8	46.	45.3	44.4	43.4	42.5	41.6	40.7	39.8	50.4
4.....	51.3	50.1	49.2	48.	46.8	45.8	44.8	43.8	42.8	41.8	40.8	39.8	51.6
5.....	54.3	53.3	52.7	52.3	52.	51.8	51.4	51.	50.6	50.2	49.8	49.4	54.1
6.....	55.5	54.3	53.9	53.3	52.8	52.4	52.	51.6	51.2	50.8	50.4	50.	54.1
7.....	56.	54.3	53.3	52.3	51.8	51.4	51.	50.6	50.2	49.8	49.4	49.	53.6
8.....	54.3	53.3	51.8	51.9	51.8	51.4	51.	50.6	50.2	49.8	49.4	49.	52.9
9.....	53.2	53.	52.3	52.3	52.	51.6	51.2	50.8	50.4	50.	49.6	49.2	52.9
10.....	53.5	51.8	51.2	51.	50.5	50.1	49.7	49.3	48.9	48.5	48.1	47.7	52.9
11.....	51.	50.3	49.3	48.3	47.5	46.8	46.1	45.4	44.7	44.	43.3	42.6	52.9
12.....	51.3	51.1	51.	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5	52.9
13.....	51.1	50.3	49.1	48.	47.	46.5	46.1	45.7	45.3	44.9	44.5	44.1	52.9
14.....	51.1	50.3	49.1	48.	47.	46.5	46.1	45.7	45.3	44.9	44.5	44.1	52.9
15.....	51.1	50.3	49.1	48.	47.	46.5	46.1	45.7	45.3	44.9	44.5	44.1	52.9
16.....	44.2	43.1	42.3	42.1	42.	41.8	41.6	41.4	41.2	41.	40.8	40.6	49.7
17.....	42.1	41.8	40.3	39.3	38.	37.	36.5	36.1	35.7	35.3	34.9	34.5	49.7
18.....	43.8	43.	42.3	42.3	42.	41.5	41.2	40.9	40.6	40.3	40.	39.7	49.7
19.....	40.	39.3	38.3	38.1	37.	36.5	36.1	35.7	35.3	34.9	34.5	34.1	49.7
20.....	41.3	41.7	41.7	41.7	41.6	41.4	41.2	41.	40.8	40.6	40.4	40.2	49.7
21.....	43.	43.	41.	40.1	39.4	38.7	38.1	37.5	36.9	36.3	35.7	35.1	49.7
22.....	50.4	49.1	48.7	48.1	47.	46.5	46.1	45.7	45.3	44.9	44.5	44.1	49.7
23.....	50.4	49.1	48.7	48.1	47.	46.5	46.1	45.7	45.3	44.9	44.5	44.1	49.7
24.....	49.1	47.8	47.1	46.6	46.	45.4	45.1	44.7	44.3	43.9	43.5	43.1	49.7
25.....	45.8	45.8	45.	44.4	44.	43.8	43.5	43.1	42.7	42.3	41.9	41.5	49.7
26.....	44.1	43.3	43.1	41.8	41.	40.5	40.1	39.7	39.3	38.9	38.5	38.1	49.7
27.....	43.1	42.4	42.3	42.3	42.	41.6	41.2	40.8	40.4	40.	39.6	39.2	49.7
28.....	43.1	42.4	42.3	42.3	42.	41.6	41.2	40.8	40.4	40.	39.6	39.2	49.7
29.....	43.1	42.4	42.3	42.3	42.	41.6	41.2	40.8	40.4	40.	39.6	39.2	49.7
30.....	48.8	48.6	48.6	48.5	48.3	48.	47.7	47.4	47.1	46.8	46.5	46.2	49.7
Means.....	48.7	48.1	47.3	46.8	46.7	46.	45.1	44.3	43.5	42.7	41.9	41.1	49.4

Degrees Fahrenheit.

NOVEMBER.]

HORIZONTAL FORCE MAGNETOMETER.

[1940.]

[97]

Göttingen time. Observatory time.	<i>h. m.</i> 6 02½ 0 22	<i>h. m.</i> 8 02½ 2 22	<i>h. m.</i> 10 02½ 4 22	<i>h. m.</i> 12 02½ 6 22	<i>h. m.</i> 14 02½ 8 22	<i>h. m.</i> 16 02½ 10 22	<i>h. m.</i> 18 02½ 12 22	<i>h. m.</i> 20 02½ 14 22	<i>h. m.</i> 22 02½ 16 22	<i>h. m.</i> 0 02½ 18 22	<i>h. m.</i> 2 02½ 20 22	<i>h. m.</i> 4 02½ 22 22	Means	Reduced to 32° F.
Nov. 3	828.	808.3	804.1	806.2	831.3	831.7	871.2	819.6	822.7	813.3	823.9	831.8	823.7	769.
3	831.3	*812.1	804.1	804.6	814.6	845.2	825.7	830.7	826.8	831.3	816.6	819.	839.1	761.5
4	815.9	815.	812.1	805.	807.1	801.8	826.6	819.	822.1	829.6	829.2	831.9	816.6	747.4
5	842.3	829.6	816.	805.	810.3	823.1	849.1	831.4	816.9	834.7	867.9	833.6	810.9	744.3
6	786.8	812.5	810.1	797.	809.1	814.5	818.3	849.7	873.4	876.5	849.7	843.4	827.6	760.
7	850.1	844.1	837.7	833.7	858.3	854.7	847.7	874.	871.7	839.	830.7	859.6	858.4	792.8
8	834.9	847.6	846.5	826.8	837.8	879.5	876.6	862.6	844.1	851.2	856.9	832.6	848.3	784.6
10	828.6	831.2	819.4	815.6	815.1	832.1	838.	823.4	831.	814.1	815.	819.	822.4	760.6
11	815.	814.9	805.7	783.1	782.4	799.	793.1	791.9	794.3	802.1	806.6	818.3	800.6	745.1
12	813.8	807.	801.8	796.4	797.9	813.7	822.5	824.9	824.9	815.1	817.6	815.3	811.9	749.8
13	+	811.9	803.7	786.2	809.7	814.	832.4	806.7	834.4	825.1	826.2	847.1	836.9	765.
14	832.	832.4	842.4	798.3	822.1	841.5	870.2	833.8	874.6	825.1	841.9	865.7	840.	786.2
15	841.1	866.8	799.7	794.9	831.9	849.7	824.3	854.9	832.2	830.1	828.8	835.	833.7	802.1
16	816.8	816.3	812.5	799.2	824.5	834.3	853.3	846.3	836.3	837.3	845.4	841.2	839.	803.1
17	819.7	810.4	803.6	797.6	806.5	806.1	827.9	819.2	821.1	810.9	810.5	830.7	831.4	793.3
18	820.3	796.8	794.9	778.6	789.6	797.1	864.8	850.8	836.7	820.7	807.6	813.2	813.7	788.7
19	819.7	810.4	803.6	797.6	806.5	806.1	827.9	819.2	821.1	810.9	810.5	830.7	831.4	793.3
20	820.3	796.8	794.9	778.6	789.6	797.1	864.8	850.8	836.7	820.7	807.6	813.2	813.7	788.7
21	858.	841.6	810.9	844.5	841.9	828.3	869.3	923.7	900.5	841.4	854.1	813.4	864.	790.4
22	853.5	855.1	800.5	866.9	866.4	928.1	878.2	868.7	931.4	906.4	871.4	1862.7	879.3	806.9
24	873.7	850.7	823.3	814.	818.4	838.9	875.	838.3	831.3	828.4	823.1	843.6	849.3	789.4
25	839.5	837.8	810.	802.5	829.5	837.3	834.4	813.1	824.2	814.1	822.3	852.4	824.	781.1
26	816.5	806.3	806.5	804.5	806.8	816.3	807.4	796.6	799.6	795.3	797.1	796.6	802.5	765.1
27	803.6	802.5	785.	783.7	801.3	829.9	810.	828.3	773.3	781.7	786.	789.2	786.1	759.6
28	801.7	792.	789.6	785.6	801.3	829.9	810.	828.3	773.3	781.7	786.	789.2	786.1	759.6
30	832.9	826.9	827.9	819.4	821.9	840.3	846.7	828.4	822.9	820.9	813.7	814.2	826.3	772.2
Means	827.9	823.9	814.1	806.1	819.4	837.7	846.8	834.8	826.7	825.6	825.6	828.6	828.	.....
Reduced to 32° F.	778.9	776.9	769.3	762.9	773.9	791.6	787.2	781.4	782.3	770.5	773.4	777.0	.....	777.60

* As before. † 12½ m. before the time, 819. + 27½ m. late, 813.3. ‡ 8 m. late. § 15 m. late, 820.8. || 10 m. before time.

[1840.]

Thermometer of Horizontal Force Magnetometer.

November.]

	A. m. 8 03½ 9 33	A. m. 10 03½ 4 33	A. m. 13 03½ 6 33	A. m. 14 03½ 8 33	A. m. 16 03½ 10 33	A. m. 18 03½ 12 33	A. m. 20 03½ 14 33	A. m. 22 03½ 16 33	A. m. 0 03½ 18 33	A. m. 2 03½ 20 33	A. m. 4 03½ 22 33	Means.
Göttingen time.....												
Observatory time.....												
Nov. 2.....	46.9	47.9	46.9	47.	47.4	46.5	50.	51.4	52.	51.7	51.	49.1
3.....	50.	48.4	47.	46.5	47.6	50.	52.	53.8	54.3	54.	53.5	50.3
4.....	52.8	52.	51.	50.5	52.	53.	54.8	56.4	56.4	56.	54.7	52.3
5.....	53.9	52.7	51.	49.5	50.	52.	53.7	56.	56.4	54.5	54.	52.8
6.....	53.5	52.9	51.9	51.	51.4	53.	54.3	56.3	56.8	54.8	54.	52.3
7.....	53.	52.	51.	50.3	51.	53.4	54.4	54.9	54.1	53.8	53.3	52.5
8.....	52.	51.9	51.9	52.3	52.3	53.	53.	51.5	51.8	51.6	51.4	51.9
9.....	52.	51.9	51.9	52.3	52.3	53.	53.6	53.5	53.1	52.3	51.	51.3
10.....	51.	50.1	50.	49.6	50.	51.6	52.6	53.5	52.1	52.3	51.	51.3
11.....	50.5	49.	47.4	46.6	47.	48.3	50.	51.5	52.	51.8	51.	49.3
12.....	50.5	49.9	49.3	49.	49.7	51.	53.4	53.8	55.3	55.	54.	51.4
13.....	49.4	48.	47.	46.	46.5	47.5	49.	50.	53.	52.	50.6	48.3
14.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	50.	49.7	49.	48.3
15.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
16.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
17.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
18.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
19.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
20.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
21.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
22.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
23.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
24.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
25.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
26.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
27.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
28.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
29.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
30.....	48.6	47.	46.	45.	46.5	47.5	49.	50.	49.9	49.7	49.	48.3
Means.....	47.3	46.7	46.	45.9	46.4	47.5	48.7	49.	49.3	48.7	47.9	47.4

Degrees Fahrenheit.

[1940.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

Octob. 1.]

Castings time. Observatory time	A. m. 0 57½ 0 17	A. m. 7 57½ 2 17	A. m. 9 57½ 4 17	A. m. 11 57½ 6 17	A. m. 13 57½ 8 17	A. m. 15 57½ 10 17	A. m. 17 57½ 12 17	A. m. 19 57½ 14 17	A. m. 21 57½ 16 17	A. m. 23 57½ 18 17	A. m. 1 57½ 20 17	A. m. 3 57½ 22 17	Means.
Oct. 1.....	67.	66.7	66.2	65.8	66.6	66.7	68.	69.2	71.	71.8	71.	70.4	68.4
2.....	69.7	68.8	68.	67.5	66.	66.5	66.8	67.5	67.5	68.	68.	68.	67.6
3.....	68.	68.	68.	67.9	68.4	68.6	68.8	67.5	67.7	68.	68.	68.	67.1
4.....	68.5	67.3	66.	66.	66.	67.	67.	61.	67.7	68.	68.	68.	69.7
5.....	68.	68.	68.	68.2	69.1	69.6	69.	64.5	67.9	69.1	68.4	67.5	68.2
6.....	68.3	68.	68.	68.6	69.5	69.2	69.	68.5	70.4	69.	68.4	67.	68.3
7.....	68.5	68.8	68.7	68.3	61.8	63.	65.	66.7	69.	69.	68.4	66.7	65.4
8.....	65.5	64.	63.	63.8	63.	64.	67.	68.7	70.1	70.7	70.5	69.6	66.5
9.....	68.2	67.	65.8	64.2	63.3	62.	61.	61.6	61.6	61.1	60.7	60.3	63.
10.....	65.8	65.8	65.4	65.	66.	67.	67.5	68.	68.1	67.	66.	63.4	66.2
11.....	61.4	59.4	57.3	56.	57.	57.5	58.4	60.	62.4	63.1	62.2	61.	59.6
12.....	59.4	57.7	56.7	56.	56.4	57.3	60.	63.4	66.	66.1	65.6	65.	60.8
13.....	64.	63.8	63.2	61.	60.	59.	59.8	60.4	61.2	61.4	60.	57.7	61.
14.....	56.	54.3	52.4	51.	52.2	52.5	53.8	55.	56.6	56.8	56.1	54.4	54.3
15.....	53.2	50.7	49.	48.	47.	47.3	48.	49.	50.	51.2	52.	52.	49.8
16.....	57.3	58.2	59.1	59.9	60.7	62.	63.5	65.4	67.	68.	68.2	68.	63.1
17.....	67.3	67.1	66.9	66.9	67.	67.	67.	67.2	67.4	67.5	67.7	67.2	67.2
18.....	67.3	66.1	65.7	65.	64.	63.2	63.	62.8	62.5	64.	65.	65.6	64.5
19.....	68.	66.	65.	65.	63.7	61.	60.	60.	61.	61.	60.	57.1	61.1
20.....	55.	53.9	52.8	51.9	52.8	53.2	55.	57.5	60.3	61.	60.5	55.	55.8
21.....	59.3	58.	56.2	54.8	55.	54.4	54.6	55.7	56.7	57.	56.	55.	56.1
22.....	44.1	42.7	40.9	40.	39.2	40.	41.	42.3	43.	43.5	43.	42.5	41.8
23.....	42.	41.1	40.8	40.	40.4	41.	43.	45.3	47.4	47.5	47.	46.5	43.5
24.....	46.	45.9	45.2	45.	44.	45.3	46.5	49.	51.3	52.	52.3	52.7	47.9
25.....	53.	53.2	53.4	53.5	53.	53.6	54.5	56.	58.	60.	61.5	56.	56.
26.....	63.9	64.3	65.	64.7	63.8	63.	62.5	62.5	62.1	63.	61.	59.5	62.9
27.....	57.8	56.8	55.2	54.	52.5	52.	53.6	53.4	54.3	53.7	53.	53.	54.
Means.....	60.3	59.2	58.4	57.7	57.9	58.1	59.1	60.3	61.7	61.9	61.5	60.7	59.74

Degrees Fahrenheit.

HORIZONTAL FORCE MAGNETOMETER.

[1840.]

Göttingen time. Observatory time.	h. m. 6 03½ 0 23	h. m. 8 03½ 2 23	h. m. 10 03½ 4 23	h. m. 12 03½ 6 23	h. m. 14 03½ 8 23	h. m. 16 03½ 10 23	h. m. 18 03½ 12 23	h. m. 20 03½ 14 23	h. m. 22 03½ 16 23	h. m. 0 03½ 18 23	h. m. 2 03½ 20 23	h. m. 4 03½ 22 23	Means.	Reduced to 32° F.
Oct. 1.....	838.3	879.7	835.2	853.	856.4	885.7.	873.3	864.	870.2	871.4	870.7	864.9	865.6	750.7
2.....	857.4	837.2	834.5	832.6	855.	887.7	875.9	876.8	857.2	880.7	850.3	856.	855.1	743.1
3.....	844.9	839.	833.6	835.3	853.2	885.6	873.	844.4	851.5	840.4	814.2	814.	843.2	733.8
5.....	736.6	769.1	781.5	780.	789.3	827.7	839.2	798.4	809.8	811.7	811.8	808.	803.6	718.2
6.....	807.7	808.	805.7	797.3	838.6	869.4	859.8	863.9	861.2	845.1	873.1	857.2	840.5	743.2
7.....	850.9	835.9	829.1	852.3	829.4	841.6	837.3	837.8	840.6	848.2	849.2	835.	840.6	753.7
8.....	832.8	832.1	814.8	815.7	832.	849.3	843.2	833.1	851.	838.9	839.7	837.8	834.2	739.2
9.....	823.3	821.4	821.	819.3	840.6	867.5	854.8	844.2	*844.8	840.9	842.3	828.7	837.4	739.3
10.....	830.1	806.9	809.5	808.	845.3	848.9	810.	787.4	829.3	829.9	826.4	825.5	821.4	724.4
12.....	839.5	838.3	833.4	864.8	891.	899.8	877.8	874.4	868.3	871.7	868.7	855.1	864.4	757.8
13.....	842.8	832.7	827.5	831.4	825.3	837.1	823.8	824.5	835.7	831.6	824.5	827.8	831.	746.2
14.....	827.4	820.8	810.4	811.8	821.2	827.3	825.7	821.8	821.6	828.4	829.3	825.5	822.7	733.5
15.....	821.1	813.4	818.6	811.	831.2	833.3	833.	837.2	739.4	790.	790.3	784.7	812.7	733.7
16.....	774.9	768.6	760.3	775.	794.5	824.	840.8	841.8	808.1	808.8	828.8	800.2	802.1	730.4
17.....	789.5	799.9	774.9	770.6	778.5	816.3	823.	831.6	799.5	845.1	831.	867.4	812.3	759.5
19.....	†847.8	827.2	.....	813.8	840.6	900.5	962.1	915.9	901.3	955.3	959.9	865.6	890.	791.1
20.....	884.8	896.5	854.3	859.9	909.2	878.8	915.6	897.4	946.8	924.9	891.5	830.4	890.8	761.
21.....	870.7	875.	858.8	901.	858.5	919.4	900.3	873.2	897.7	893.9	890.8	830.8	880.8	780.3
23.....	876.2	868.5	853.6	840.4	848.7	931.6	887.1	862.2	868.5	831.6	821.7	851.6	861.	770.4
23.....	849.	850.6	803.3	802.9	837.	866.4	865.8	867.8	849.8	835.7	840.6	847.1	843.	769.7
24.....	836.5	824.2	816.6	824.7	818.2	847.6	859.5	837.6	817.1	824.9	817.1	829.8	829.6	757.6
26.....	877.	755.5	783.	785.1	797.6	828.5	821.2	804.2	786.2	791.4	790.2	786.3	787.2	769.4
27.....	785.7	779.4	763.9	778.2	777.8	807.9	806.	786.4	780.7	845.8	869.6	†850.	802.6	770.3
28.....	894.5	850.3	831.1	805.2	829.6	859.7	870.7	831.3	841.8	873.9	856.8	852.5	852.3	804.9
29.....	841.2	839.	848.	834.1	837.	890.8	917.8	902.	855.8	852.	861.2	864.1	863.6	789.4
30.....	880.4	910.5	876.1	865.7	875.8	906.7	910.8	870.4	846.8	841.2	845.	846.3	872.9	778.2
31.....	850.	836.4	825.8	803.9	823.2	839.2	858.7	832.3	816.2	†15.8	822.	844.6	830.5	765.5
Means.....	837.3	832.8	819.4	821.2	834.9	861.8	862.	846.3	842.8	845.2	845.2	837.9	840.64	.....
Reduced to 32° F.	750.3	748.6	738.1	742.5	755.2	780.5	777.2	758.3	751.	751.8	753.8	749.9	.....	754.82

As before. • Three minutes late. † Four minutes late. ‡ Twelve and a half minutes before this, observation 892.7, and three minutes after it, observation 893.7.

[1840.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

OCTOBER.]

Göttingen time. Observatory time.	A. m. 6 02½ 0 23		A. m. 8 02½ 2 23		A. m. 10 02½ 4 23		A. m. 12 02½ 6 23		A. m. 14 02½ 8 23		A. m. 16 02½ 10 23		A. m. 18 02½ 12 23		A. m. 20 02½ 14 23		A. m. 22 02½ 16 23		A. m. 0 02½ 18 23		A. m. 2 02½ 20 23		A. m. 4 02½ 22 23		Means.
	A. m. 6 02½ 0 23		A. m. 8 02½ 2 23		A. m. 10 02½ 4 23		A. m. 12 02½ 6 23		A. m. 14 02½ 8 23		A. m. 16 02½ 10 23		A. m. 18 02½ 12 23		A. m. 20 02½ 14 23		A. m. 22 02½ 16 23		A. m. 0 02½ 18 23		A. m. 2 02½ 20 23		A. m. 4 02½ 22 23		
Oct. 1.....	66.3		66.		65.6		65.1		66.		66.4		67.8		69.		70.9		71.2		70.8		70.3		67.9
2.....	69.		68.1		67.4		67.1		66.		66.		66.3		66.5		66.8		66.9		67.		67.3		67.
3.....	67.3		67.2		67.1		67.1		66.		66.3		66.		66.8		66.8		66.9		67.3		67.3		67.
4.....	67.8		66.5		65.		63.9		64.3		66.		66.		66.8		66.8		66.8		67.3		67.3		66.8
5.....	61.		60.1		58.6		57.2		58.3		59.		61.4		64.		67.3		68.		67.3		66.5		69.4
6.....	65.6		64.		63.7		61.1		63.5		63.5		66.3		68.		69.5		68.2		67.3		66.3		66.4
7.....	64.6		63.8		61.9		61.2		61.3		63.8		64.4		66.		67.8		67.7		67.		65.7		64.8
8.....	64.2		63.		62.		61.9		62.		63.3		66.		68.		70.		70.		70.		68.8		65.8
9.....	67.7		66.2		65.		63.2		63.5		61.4		66.5		60.6		60.3		60.		60.		64.2		63.3
10.....	65.1		65.		64.5		64.3		65.		66.		67.		67.4		66.8		65.6		64.3		62.3		65.3
11.....	60.3		58.3		56.8		55.		56.5		56.2		57.		59.3		61.		61.5		60.8		60.		58.5
12.....	59.2		56.8		55.5		54.8		55.5		56.6		64.3		63.1		65.		65.		64.4		64.		60.2
13.....	63.		62.1		61.		60.1		59.		58.6		59.		59.5		60.		59.8		58.6		56.4		59.8
14.....	54.8		52.9		51.		49.4		51.		51.		52.3		53.6		54.9		55.1		54.3		53.		52.7
15.....	50.9		49.		47.7		46.2		46.		46.5		47.		48.4		49.		49.5		50.5		51.		48.5
16.....	57.		57.9		58.9		58.9		60.3		60.8		63.5		65.5		66.8		67.		67.		66.8		63.9
17.....	66.4		66.		65.9		65.9		66.1		66.5		66.7		67.		67.		65.2		66.6		66.3		66.3
18.....	65.7		65.1		64.8		64.		63.5		63.7		63.3		63.		63.		63.6		63.		63.		63.4
19.....	63.5		63.5		63.		61.5		60.4		59.3		58.6		58.6		59.		63.4		57.8		55.3		60.3
20.....	53.4		52.1		51.		50.		51.5		52.2		54.3		57.		59.4		60.		59.5		59.		54.9
21.....	58.1		56.8		54.9		53.		53.3		53.1		53.3		54.3		55.		55.		54.		53.5		54.5
22.....	42.		41.8		39.4		38.2		38.3		39.3		40.		41.5		42.		42.5		41.5		41.5		40.7
23.....	40.5		39.9		39.		38.2		39.5		40.		43.		44.		46.		45.		45.5		45.		42.1
24.....	44.5		44.		43.5		43.1		43.9		44.		45.8		48.		51.		51.3		51.5		52.		46.8
25.....	51.9		52.		51.9		53.		52.		53.		54.		56.		57.5		59.4		61.		62.		55.2
26.....	62.8		63.3		63.4		63.		63.		62.4		63.		61.8		61.		60.5		59.		67.5		61.6
27.....	56.1		54.8		53.2		52.		51.2		51.4		51.4		53.		52.5		53.		51.		51.		52.3
Means.....	59.2		58.3		57.4		56.6		56.9		57.4		58.5		59.5		60.7		60.8		60.3		59.5		58.7

Degrees Fahrenheit.

OCTOBER.]

TRIPLE OBSERVATIONS.

[1840.]

	Declination.			Vertical force.				Horizontal force.				Tempera- ture Fah- renheit.
	<i>h. m.</i> 13 52½ 8 12	<i>h. m.</i> 14 00 8 18½	<i>h. m.</i> 14 07½ 8 27	<i>h. m.</i> 13 50 8 09½	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 14 05 8 24½	Tempera- ture Fah- renheit.	<i>h. m.</i> 13 55 8 14½	<i>h. m.</i> 14 02½ 8 22	<i>h. m.</i> 14 10 8 29½		
Göttingen time.....	494.1	494.9	494.7	127.5	99.3	114.2	66.5	853.5	856.4	857.1	66.	
Observatory time.....	496.1	497.6	496.2	229.1	144.3	203.7	66.	851.8	856.4	857.1	66.	
	497.	497.	496.7	178.1	201.6	216.1	68.4	849.2	853.2	857.8	68.	
	501.1	501.6	500.6	454.	450.3	449.7	56.	787.8	789.3	790.1	54.2	
	498.	497.3	497.3	419.9	391.9	344.3	59.1	837.5	838.6	839.1	58.3	
	494.7	494.5	495.6	260.5	230.8	277.2	63.5	831.1	839.4	830.5	62.5	
	495.6	495.	494.	294.	256.3	264.1	61.8	831.5	832.	832.8	61.2	
	497.4	493.8	497.2	339.9	240.5	275.6	63.	837.8	840.6	844.8	62.	
	500.	500.6	499.4	251.6	236.4	283.1	63.8	842.8	845.3	846.6	62.5	
	498.4	498.5	498.2	162.7	211.	192.9	66.	888.7	891.	892.4	66.	
	506.	506.	506.3	365.5	362.9	366.1	57.	825.5	826.3	824.8	56.5	
	502.7	503.6	503.2	415.8	410.9	404.5	56.4	821.4	821.2	826.	55.5	
	504.	504.7	505.8	242.9	243.9	236.2	60.	828.6	831.2	831.7	59.	
	497.4	498.2	499.6	456.2	452.8	449.4	52.2	795.2	794.5	797.	51.	
	502.9	502.	503.2	540.1	545.3	542.5	47.	783.1	778.5	784.3	46.	
	489.6	492.	494.3	283.2	263.2	249.8	60.7	831.2	840.6	839.2	60.2	
	.....	463.5	468.8	.....	— 74.3	— 84.2	67.	931.4	909.2	909.6	66.1
	476.	477.6	478.	40.4	36.6	39.	64.	854.3	856.5	859.9	63.5	
	.....	484.8	.....	.....	— 51.1	.....	63.7	.....	848.7	.....	60.4
	483.6	482.6	483.7	390.8	237.1	209.3	53.8	828.	824.5	824.5	51.5	
	475.5	475.8	476.	174.5	169.	167.	55.	817.4	818.2	819.5	53.3	
	486.6	485.6	485.	571.4	591.3	579.3	39.2	799.9	797.6	800.3	38.3	
	489.5	489.1	487.7	526.3	533.8	533.8	40.4	776.7	777.8	781.8	39.5	
	476.4	475.9	475.	453.2	436.5	435.6	44.	841.1	838.6	832.	42.9	
	488.3	488.9	489.7	214.4	222.1	214.5	53.	854.2	857.	861.	53.	
	484.9	485.4	485.	272.	289.6	271.5	63.8	874.7	875.9	879.	63.	
	482.1	482.4	483.5	593.1	601.7	581.7	52.5	823.9	822.2	820.1	51.2	

[1946.]

DECLINATION MAGNETOMETER.

NOVEMBER.]

Göttingen time... Observatory time.	A. m. 0 00 0 19½	A. m. 8 00 3 19½	A. m. 10 00 4 19½	A. m. 12 00 6 19½	A. m. 14 00 8 19½	A. m. 16 00 10 19½	A. m. 18 00 12 19½	A. m. 20 00 14 19½	A. m. 22 00 16 19½	A. m. 0 00 16 19½	A. m. 2 00 20 19½	A. m. 4 00 23 19½	Means.
Nov. 2.....	481.7	481.3	482.	476.9	484.5	486.7	471.6	474.1	478.4	478.6	481.5	478.9	479.7
3.....	478.4	479.7	481.2	481.4	488.1	480.	475.5	473.1	474.7	478.1	480.1	480.4	479.1
4.....	480.1	480.9	481.8	483.3	483.7	478.9	477.	471.8	476.6	479.3	482.	483.	479.6
5.....	480.4	479.6	487.9	495.4	485.7	478.7	473.5	474.1	477.9	486.5	484.3	483.9	481.3
6.....	480.	488.	491.4	494.3	492.	482.3	477.4	473.4	473.9	480.3	483.5	480.5	483.9
7.....	480.4	482.9	486.7	486.4	491.5	484.3	483.5	474.5	474.6	483.1	485.1	486.	481.4
9.....	483.6	496.2	496.1	494.9	489.3	483.6	475.	474.7	476.4	483.9	485.	485.5	485.3
10.....	482.7	483.1	484.4	486.	491.2	487.	478.5	478.1	481.5	481.3	484.	481.6	483.3
11.....	483.4	484.1	483.2	486.1	491.3	485.5	478.	477.3	480.7	485.9	481.3	483.4	483.3
12.....	480.3	482.7	484.4	486.3	489.3	486.3	478.	477.3	481.9	481.	483.	483.	482.7
13.....	481.9	482.4	483.4	487.2	483.9	484.	476.3	471.3	477.4	474.3	484.	486.1	480.9
14.....	479.	478.7	475.9	478.5	486.	471.5	475.	469.4	474.3	482.7	484.	489.9	479.6
16.....	480.1	474.5	482.9	487.9	481.	463.	475.6	476.4	480.5	507.9	486.	487.8	482.
17.....	484.4	478.5	480.4	484.3	483.7	483.9	472.4	473.7	480.6	486.8	488.1	487.9	483.
18.....	482.	483.1	483.5	485.9	489.8	476.	471.6	474.4	478.9	480.9	483.3	485.1	481.2
19.....	483.7	481.3	481.2	483.6	486.5	481.6	476.7	478.6	478.1	481.7	483.3	484.1	481.5
20.....	481.	484.	486.1	485.1	486.	466.8	461.5	466.3	477.3	471.	516.6	478.	480.
21.....	458.5	479.6	443.7	471.3	482.8	467.4	474.3	468.3	474.	477.2	478.3	480.3	471.3
23.....	.....	.....	.....	.....	.....	.....	448.1	453.6	457.1	464.8	464.8	460.7	458.
24.....	463.8	454.8	465.7	461.4	460.1	460.1	446.8	451.4	460.4	461.3	462.4	460.6	459.1
25.....	460.2	457.8	460.8	462.8	462.1	461.6	454.3	460.3	458.	461.9	471.7	476.	460.9
26.....	459.7	459.9	461.7	462.3	464.4	461.7	453.1	461.	459.	456.5	465.8	465.3	459.5
27.....	460.3	458.5	460.7	461.5	.....	.....	.....	.....	454.	456.9	463.4	460.3	459.4
28.....	459.7	462.5	467.3	465.6	466.4	454.4	453.3	448.3	*457.8	461.1	463.9	460.3	460.1
30.....	461.8	459.5	463.	463.	463.7	459.9	453.3	454.	457.3	461.9	461.1	456.8	459.5
Means.....	475.3	476.4	477.2	479.3	481.7	474.9	468.3	468.	473.	476.1	479.	478.	475.5

As before.

* Five minutes before time.

November.]

VERTICAL FORCE MAGNETOMETER.

[1940.

[97]

36

Getting time... Observatory time	h. m. 5 57 1/2 0 17	h. m. 7 57 1/2 2 17	h. m. 9 57 1/2 4 17	h. m. 11 57 1/2 6 17	h. m. 13 57 1/2 8 17	h. m. 15 57 1/2 10 17	h. m. 17 57 1/2 12 17	h. m. 19 57 1/2 14 17	h. m. 21 57 1/2 16 17	h. m. 23 57 1/2 18 17	h. m. 1 57 1/2 20 17	h. m. 3 57 1/2 22 17	Means.	Reduced to 32° F.
Nov. 2.	632.8	674.2	697.5	721.8	709.7	679.1	654.	621.7	578.5	552.8	591.8	614.6	644.	701.4
3.	633.6	670.1	697.5	729.8	705.8	679.5	597.5	547.6	509.4	534.9	548.3	559.3	617.7	678.9
4.	570.2	601.2	630.9	631.5	634.3	661.9	538.9	564.9	408.6	248.6	288.4	308.7	489.4	558.4
5.	304.4	359.5	398.4	429.2	445.1	430.7	357.2	331.2	273.	256.2	291.	329.2	349.8	418.8
6.	333.9	384.5	398.4	400.9	437.7	373.4	343.9	342.	393.7	425.8	394.	355.1	377.8	446.5
7.	382.5	374.9	372.8	408.6	410.5	383.	361.8	317.5	321.7	347.4	334.	345.	361.6	439.
8.	451.1	404.3	431.8	394.5	383.8	388.7	432.2	465.2	479.6	510.9	515.	467.	442.8	508.
9.	458.5	475.2	473.7	491.	469.8	423.9	395.3	407.	383.4	359.6	395.	391.2	427.	490.3
10.	423.7	439.2	471.5	506.4	476.8	462.3	432.	402.9	341.6	358.1	347.9	370.6	418.5	476.6
11.	403.5	411.6	420.6	429.2	421.5	390.	376.1	346.7	247.2	225.5	266.5	286.	351.2	416.4
12.	324.2	324.2	363.4	386.5	426.1	348.9	298.3	271.5	253.2	327.7	435.6	392.9	347.8	412.7
13.	404.7	431.2	436.5	476.	531.3	449.9	415.6	387.3	407.7	383.4	408.4	427.4	429.9	485.1
14.	588.	515.3	476.1	597.2	602.8	635.7	606.3	666.7	617.4	585.8	636.6	654.4	598.7	632.7
15.	615.6	592.7	708.1	725.2	755.8	794.	650.	684.4	637.1	621.9	593.9	570.3	652.4	683.3
16.	603.8	805.4	537.7	642.8	662.	708.3	673.4	694.1	698.4	687.4	679.7	699.6	656.9	698.1
17.	769.4	740.5	738.6	743.1	730.8	704.1	670.9	706.9	721.	679.9	640.6	687.2	709.4	736.3
18.	688.	647.5	686.5	682.	673.4	650.2	640.9	596.4	593.5	591.6	589.5	621.5	636.8	671.4
19.	499.	565.9	398.	484.	742.1	777.	778.7	856.	828.	685.4	686.9	648.1	661.6	693.1
20.	210.4	238.4	290.7	311.8	330.7	294.3	256.7	243.8	209.8	195.8	225.9	239.5	254.1	308.
21.	264.7	332.5	389.4	358.7	389.6	372.	373.9	386.7	341.4	352.4	341.2	397.7	351.5	397.7
22.	392.9	414.7	487.	467.	381.6	367.2	340.2	350.4	357.9	366.1	372.7	385.4	367.5	408.1
23.	334.5	383.9	368.2	379.4	435.5	423.8	392.4	375.1	456.5	377.9	394.6	401.7	409.	443.9
24.	303.4	300.5	284.9	281.4	298.4	277.	241.9	232.2	175.5	136.2	113.9	138.4	230.7	286.5
Means.	465.3	468.4	475.4	501.9	522.4	498.6	470.4	463.	438.1	422.2	431.	441.7	466.24	.....
Reduced to 32° F.	517.4	518.6	523.1	548.1	568.3	545.4	520.6	516.9	492.7	479.	466.5	496.	.....	517.41

As before.

* Twenty-five minutes late, observation 329.2.

† Thirty-five minutes late, obs.

[1840.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

November.]

Göttingen time..... Observatory time.....	A. m. 5 57½ 0 17	A. m. 7 57½ 2 17	A. m. 9 57½ 4 17	A. m. 11 57½ 6 17	A. m. 13 57½ 8 17	A. m. 15 57½ 10 17	A. m. 17 57½ 12 17	A. m. 19 57½ 14 17	A. m. 21 57½ 16 17	A. m. 23 57½ 18 17	A. m. 1 57½ 20 17	A. m. 3 57½ 22 17	Means
Nov. 2.....	50.8	50.1	49.8	47.8	48.	48.3	49.4	51.	53.5	56.3	58.	59.4	50.4
3.....	51.3	50.1	49.2	48.	48.	48.8	50.8	53.	54.5	55.8	56.1	56.9	51.6
4.....	54.3	53.3	53.7	53.3	53.	52.8	53.6	55.	55.5	57.3	56.6	55.5	54.1
5.....	55.5	54.3	53.9	53.	51.	51.	53.	54.8	55.	57.	55.	55.	54.1
6.....	55.	54.3	53.2	53.3	53.	53.4	53.5	54.5	55.5	56.3	55.	54.6	54.
7.....	54.3	53.3	51.8	51.8	51.8	52.	53.3	55.5	56.	55.3	54.9	53.2	53.6
8.....	53.3	53.3	53.3	53.3	53.	53.	53.	53.	53.5	53.7	53.8	53.5	53.9
9.....	53.3	53.	53.3	53.3	53.	53.	53.	53.4	54.5	54.	53.3	53.	53.3
10.....	53.5	51.8	51.2	51.	51.	51.5	53.	53.4	53.7	53.1	53.	53.	53.6
11.....	51.	50.3	49.2	48.2	48.5	48.3	49.6	51.4	53.	56.3	56.	55.	52.9
12.....	51.3	51.1	51.	50.5	50.5	51.5	53.5	54.	55.	54.5	53.5	53.	53.8
13.....	51.1	50.2	49.1	48.	47.	47.5	49.	50.8	51.4	51.4	51.	50.5	49.7
14.....	44.2	43.1	43.3	42.1	42.	42.	43.5	43.	43.7	44.	43.3	43.3	43.9
15.....	42.1	41.8	40.2	39.2	39.	40.	41.6	42.	43.7	44.5	44.	43.6	41.9
16.....	43.8	43.	43.3	43.3	43.	41.5	43.	42.	41.6	41.8	41.	40.7	43.
17.....	40.	39.2	39.3	39.1	39.	41.	41.5	41.6	41.6	41.5	43.8	41.6	40.8
18.....	41.3	41.7	41.7	41.7	41.6	42.4	43.	44.3	45.	45.6	44.8	44.	43.1
19.....	43.	41.	41.	40.1	39.4	39.7	40.6	43.	43.	45.	45.	44.	43.1
20.....	50.4	49.1	48.7	48.1	47.	47.3	49.	50.3	51.	51.	50.	50.	49.3
21.....	49.1	47.8	47.1	46.8	46.	46.4	46.8	46.	46.	47.1	46.8	46.8	46.8
22.....	45.8	45.	44.4	44.4	44.	44.3	45.	45.6	45.6	45.3	45.	44.9	45.
23.....	44.1	43.3	43.1	41.8	41.	41.	43.	43.	43.	44.	44.2	44.	43.3
24.....	43.	43.4	43.3	43.3	43.	43.1	43.1	46.	46.6	46.9	46.1	45.7	44.2
25.....	48.8	48.6	48.6	48.5	48.3	49.	49.8	50.5	51.7	53.3	53.	50.9	49.9
Means.....	48.7	48.1	47.3	46.8	46.7	47.	48.1	49.3	49.5	50.3	49.8	49.1	48.4

Degrees Fahrenheit.

NOVEMBER.]

HORIZONTAL FORCE MAGNETOMETER.

[1940.]

[97]

33

Göttingen time. Observatory time.	h. m. 0 22	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	Means	Reduced to 32° F.
Nov. 3	828.	808.3	804.1	808.2	831.3	831.7	871.2	819.6	822.7	813.3	822.9	831.8	822.7	769.
3	821.3	*812.1	804.1	804.6	815.5	845.2	825.7	830.7	826.6	821.3	816.5	819.	829.1	761.5
4	815.9	815.	812.1	805.	807.1	801.8	826.5	819.	822.1	826.3	826.5	829.9	816.6	747.4
5	842.3	829.6	816.	805.	810.3	823.1	849.1	831.6	816.9	834.7	867.9	893.6	810.9	744.3
6	786.8	812.5	810.1	797.	808.1	814.5	818.3	849.7	873.4	875.5	843.7	843.4	827.8	760.
7	850.1	844.1	837.7	833.7	868.3	854.7	947.7	874.	871.7	839.	830.7	859.6	856.4	792.8
9	834.9	847.6	846.5	826.8	837.8	870.5	876.6	862.6	844.1	851.3	858.9	823.6	848.3	794.6
10	828.5	831.2	819.4	815.5	818.1	838.1	836.	823.4	831.	814.1	815.	819.	822.4	760.6
11	815.	814.9	805.7	783.1	783.4	799.	793.1	791.9	794.3	802.1	806.6	818.3	800.6	745.1
12	813.8	807.	801.8	796.4	797.9	818.7	832.5	824.9	834.4	815.1	817.6	815.3	811.9	749.8
13	811.9	803.7	803.7	786.2	809.7	814.	832.4	806.7	834.4	866.2	884.	847.1	826.9	765.
14	832.	832.4	843.4	798.3	832.1	841.5	870.2	835.8	874.8	825.1	841.9	866.7	840.	786.2
15	841.1	868.8	799.7	794.9	831.9	849.7	824.8	854.9	852.2	830.1	828.8	835.	833.7	802.1
17	813.7	816.3	812.5	799.2	824.5	834.3	858.3	820.7	821.1	810.9	845.4	841.2	839.	802.1
18	816.8	823.1	806.9	803.1	826.	857.2	839.3	820.7	821.1	810.9	810.5	820.7	831.4	793.3
19	819.7	810.4	803.6	797.6	805.5	806.1	827.9	819.2	821.2	820.7	807.6	813.2	812.7	789.7
20	820.3	798.8	794.9	778.5	789.6	797.1	864.8	850.8	836.7	859.6	819.	853.	821.8	790.4
21	853.	841.6	819.9	844.5	841.9	828.3	869.3	923.7	909.5	841.4	854.1	813.4	864.	835.5
23	852.5	856.1	860.5	863.9	869.4	823.1	878.2	868.7	931.4	905.4	871.4	1862.7	879.3	806.9
24	873.7	850.7	826.3	814.	819.4	838.9	875.	838.3	881.3	823.1	823.4	843.5	849.3	789.4
25	839.5	827.8	810.	863.5	820.5	837.3	834.4	813.1	824.3	814.1	832.3	852.4	824.	781.1
26	815.5	806.2	806.5	804.5	805.8	810.3	897.4	795.6	793.6	795.3	797.1	796.6	802.5	765.1
27	803.6	809.5	786.	783.7	801.3	829.9	810.	826.3	773.3	781.7	786.	789.2	786.1	759.6
28	801.7	792.	799.6	785.8	801.3	829.9	810.	826.3	815.6	808.5	832.9	809.7	809.3	777.2
30	832.9	826.9	837.9	819.4	821.9	840.3	845.7	828.4	822.9	820.9	813.7	814.2	826.3	772.2
Means	827.9	823.9	814.1	806.1	816.4	837.7	846.3	834.8	836.7	825.5	825.8	828.5	829.	.....
Reduced to 32° F.	778.9	776.9	769.3	762.9	773.9	791.6	787.2	781.4	792.3	770.5	773.4	777.6	.....	777.80

* As before. † 1m. late. ‡ 12½m. before the time, 819. + 27½m. late, 813.3. § 6m. late. ¶ 13m. late. ¶ 15½m. late, 820.8. ** 10m. before time.

[1940.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

November.]

Gauss time.....	A. m. 6 03½ 0 22	A. m. 8 03½ 2 22	A. m. 10 03½ 4 22	A. m. 12 03½ 6 22	A. m. 14 03½ 8 22	A. m. 16 03½ 10 22	A. m. 18 03½ 12 22	A. m. 20 03½ 14 22	A. m. 22 03½ 16 22	A. m. 0 03½ 18 22	A. m. 2 03½ 20 22	A. m. 4 03½ 22 22	Means.
Nov. 2.....	46.9	47.9	46.9	46.1	47.	47.4	48.5	50.	51.4	52.	51.7	51.	49.1
3.....	50.	48.4	47.	46.5	46.5	47.6	50.	53.	53.8	54.3	54.	53.8	50.3
4.....	53.8	52.	51.	50.5	50.5	52.	53.	54.8	56.4	56.4	56.	54.7	53.2
5.....	53.9	52.7	51.	49.8	49.5	50.	52.	53.7	56.	56.3	54.5	54.	52.8
6.....	53.5	52.9	51.9	51.	51.	51.4	53.2	54.2	55.3	56.8	54.8	54.	52.5
7.....	53.	52.	51.	50.8	50.3	51.	53.4	54.4	54.9	54.1	53.8	53.2	51.9
8.....	52.	51.9	51.9	51.9	52.3	52.3	53.	53.	51.5	51.8	51.6	51.4	51.3
9.....	51.	50.1	50.	49.6	50.	51.	51.6	52.6	53.5	53.1	53.3	51.	51.2
10.....	50.	49.	47.4	46.6	47.	47.	48.3	50.	51.5	52.	51.8	51.	49.3
11.....	50.5	49.9	49.3	49.	49.	49.7	51.	53.4	.....	55.3	55.	54.	51.4
12.....	.....	52.	50.9	49.6	49.	50.	51.3	52.6	53.5	53.	53.	50.6	51.3
13.....	49.4	48.	47.	46.	46.	48.5	47.5	49.	50.	50.	49.7	49.	48.2
14.....	49.5	41.3	40.5	40.9	40.7	41.	43.	43.8	43.3	43.9	43.3	41.4	41.9
15.....	40.3	39.1	38.8	37.5	37.7	39.3	41.	42.5	43.5	43.5	43.4	43.	43.7
16.....	42.5	41.3	41.	41.	41.	40.5	41.	41.	41.	40.3	40.	39.4	40.8
17.....	39.	38.	37.4	37.	37.5	39.	40.7	40.8	40.3	40.3	40.4	40.3	39.2
18.....	40.	40.1	40.1	40.1	40.4	41.3	42.	43.3	44.	44.	43.4	43.	41.8
19.....	41.5	40.3	40.2	39.	38.	38.5	40.	42.	42.4	43.	43.1	43.	40.9
20.....	51.1	52.9	54.9	55.8	56.1	57.5	57.6	57.2	58.	53.7	52.	50.5	54.6
21.....	49.	47.9	46.8	46.	46.	46.	47.5	49.	49.7	49.4	49.5	47.6	47.9
22.....	46.9	46.1	45.1	45.	45.	44.4	44.8	45.	45.5	45.9	45.8	45.5	45.4
23.....	.....	44.1	43.8	43.	43.	43.3	44.	44.7	44.6	44.1	43.5	43.1	43.7
24.....	42.3	41.3	40.4	40.	.....	.....	.....	.....	41.	41.	41.1	40.5	40.9
25.....	40.1	40.	40.	39.9	39.9	40.	41.	43.	45.3	45.3	44.9	44.3	43.
26.....	47.5	47.3	47.1	47.	47.5	48.	49.	50.	51.3	51.3	51.3	49.5	48.9
Means.....	47.3	46.7	46.	45.5	45.9	46.4	47.5	48.7	49.	49.2	48.7	47.9	47.4

Degrees Fahrenheit.

November.]

TRIPLE OBSERVATIONS.

[1940.

[97]

40

	Declination.			Vertical force.				Horizontal force.			Temperature Fahr- renheit.
	<i>h. m.</i> 13 53½ 8 12	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 07½ 8 27	<i>h. m.</i> 13 50 8 09½	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 14 05 8 24½	Temperature Fahr- renheit.	<i>h. m.</i> 13 55 8 14½	<i>h. m.</i> 14 02½ 8 23	<i>h. m.</i> 14 10 8 29½	
Nov. 2.....	489.9	484.5	481.5	717.9	709.7	702.3	48.	830.2	821.3	818.	47.
3.....	486.9	488.1	488.	712.6	705.8	704.5	48.	815.	814.5	817.4	46.5
4.....	483.3	482.7	482.1	695.1	694.3	617.5	52.	808.9	807.1	805.9	50.5
5.....	486.7	485.7	486.1	453.6	445.1	449.	51.	811.7	810.3	810.4	49.5
6.....	490.7	492.	494.5	424.2	427.7	424.4	52.	802.8	809.1	809.9	51.
7.....	490.6	491.5	488.6	406.5	410.5	401.9	51.8	861.	858.3	863.2	50.2
8.....	490.5	489.2	486.6	379.4	383.8	384.5	53.	836.7	837.6	839.9	52.2
9.....	492.3	491.2	490.6	452.6	469.8	473.7	51.	817.2	813.1	815.6	50.
10.....	491.2	491.2	487.3	472.2	476.8	477.6	48.5	788.4	782.4	778.2	47.
11.....	489.2	489.2	490.3	416.9	421.5	414.4	50.5	798.3	797.9	799.6	49.
12.....	483.1	482.8	483.3	433.3	426.1	414.9	50.5	811.8	809.7	810.4	49.
13.....	487.6	486.	484.1	616.4	531.3	536.6	47.	820.	822.1	825.7	46.
14.....	482.	481.	480.5	611.1	602.8	615.4	42.	838.6	831.9	811.5	40.7
15.....	483.8	483.7	483.4	759.8	755.8	763.	39.	822.2	824.5	829.	37.7
16.....	490.	489.8	488.9	668.7	662.	661.6	42.	826.7	828.	829.9	41.
17.....	485.2	485.5	485.8	747.4	730.8	739.8	38.	806.1	805.5	806.7	37.5
18.....	486.	486.	485.7	670.9	673.4	665.6	41.6	784.	789.6	797.6	40.4
19.....	477.2	482.8	481.5	743.2	742.1	742.9	39.4	846.5	841.9	861.1	38.
20.....	459.3	460.1	461.1	521.9	511.	511.7	57.	866.9	869.4	867.	56.1
21.....	461.7	462.1	463.1	336.4	330.7	324.1	47.	817.9	818.4	820.5	46.
22.....	464.9	464.4	466.7	371.4	369.6	376.6	.....	818.2	820.5	827.1	45.
23.....	.....	.....	.....	419.4	367.2	417.3	44.	804.6	805.8	805.2	43.
24.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
26.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
27.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
28.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30.....	464.6	463.7	463.3	291.6	293.4	286.	42.	820.5	821.9	822.1	39.5
							48.3				47.5

[1840.]

DECLINATION MAGNETOMETER.

Göttingen time. Observatory time	A. m. 6 00 0 19½	A. m. 8 00 2 19½	A. m. 10 00 4 19½	A. m. 12 00 6 19½	A. m. 14 00 8 19½	A. m. 16 00 10 19½	A. m. 18 00 12 19½	A. m. 20 00 14 19½	A. m. 23 00 16 19½	A. m. 0 00 18 19½	A. m. 3 00 20 19½	A. m. 4 00 22 19½	Means.
Dec. 1.....	458.7	459.5	459.4	460.9	462.6	461.	453.6	455.5	458.1	462.3	461.	462.	459.5
" 2.....	461.	460.7	461.8	461.6	464.3	466.6	457.5	455.7	450.	448.1	461.1	468.8	459.8
" 3.....	462.	460.7	460.4	463.	466.6	466.3	456.5	455.	455.	463.4	460.7	450.6	460.7
" 4.....	460.8	460.7	460.4	459.4	462.7	462.4	453.	450.4	456	455.6	461.	463.1	458.8
" 5.....	456.	457.9	461.9	461.9	462.7	464.2	460.3	460.3	449.5	455.6	460.9	462.	459.5
" 7.....	*460.5	460.3	460.5	462.3	464.2	463.4	456.8	456.5	457.8	461.	460.1	460.5	460.3
" 8.....	458.6	460.1	461.3	461.7	467.5	460.1	453.1	452.	455.3	459.7	460.8	460.2	458.7
" 9.....	462.2	456.	469.7	460.4	468.	468.	454.3	455.5	456.8	458.7	460.	460.2	460.8
" 10.....	459.3	458.6	460.2	461.3	463.	460.5	454.3	443.	454.4	458.1	458.6	463.9	458.4
" 11.....	457.8	457.6	457.2	464.	467.5	461.8	443.2	450.7	450.9	461.1	462.3	457.6	458.
" 12.....	458.4	448.	462.8	461.3	448.8	450.7	446.4	449.5	456.	460.2	475.9	465.7	463.8
" 14.....	459.2	459.3	460.2	459.1	468.	460.6	454.	450.8	457.8	459.4	460.6	465.1	459.3
" 15.....	469.7	466.7	468.5	468.2	463.	463.3	452.4	461.1	455.	460.1	462.4	460.6	462.2
" 16.....	469.1	459.	469.5	469.	465.1	464.	450.	450.1	455.6	460.	461.	461.4	468.6
" 17.....	458.9	458.2	463.2	459.6	465.4	460.5	445.9	463.1	451.7	453.8	468.3	464.	457.7
" 18.....	461.9	449.1	461.7	441.8	446.9	451.9	443.3	441.1	443.6	444.3	446.1	446.7	447.4
" 19.....	443.3	443.6	435.9	437.3	436.3	436.6	428.9	436.9	437.8	443.5	454.	452.8	449.7
" 21.....	+431.4	430.5	438.3	393.1	420.1	425.5	442.5	435.6	439.2	443.1	465.	455.6	434.3
" 22.....	454.9	449.9	447.	446.6	454.5	450.5	441.9	440.5	442.	446.	448.7	448.7	447.6
" 23.....	446.8	444.8	445.	440.3	454.3	454.6	439.6	437.7	436.	435.3	446.5	444.2	444.6
" 24.....	454.3	449.	449.1	444.9	453.2	450.	440.	437.	446.	447.2	449.5	450.5	447.6
" 25.....	447.9	447.	446.6	446.7	453.7	456.3	445.6	445.1	447.	450.1	463.7	449.9	449.1
" 26.....	449.5	+448.1	449.2	452.3	452.5	453.8	444.	439.	445.8	450.4	453.9	450.9	449.
" 28.....	448.7	449.5	448.	450.9	454.5	456.6	450.5	442.	452.1	453.5	.....	468.7	451.8
" 29.....	455.6	471.9	473.4	436.4	465.9	448.6	.....	449.7	448.9	458.8	469.1	461.4	467.9
" 30.....	459.	456.1	459.3	459.	466.	467.4	459.5	449.7	448.9	457.1	456.8	462.5	458.7
" 31.....	462.9	449.3	466.1	456.	464.7	469.	454.	448.4	457.7	460.6	457.4	468.3	459.4
Means.....	455.	454.2	456.2	451.1	457.2	457.2	449.5	447.9	450.6	454.4	458.6	459.1	454.28

As before.

• Six minutes late.

Registered 521.4.

One minute late.

[1840.]

VERTICAL FORCE MAGNETOMETER.

December.]

Göttingen time... Observatory time.	h. m. 0 17	h. m. 7 57½ 3 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.	Reduced to 32° F.
Dec. 1.....	170.8	243.7	315.8	357.5	404.	406.3	432.	410.8	374.2	382.4	411.6	458.5	364.	396.8
2.....	484.2	516.4	547.4	586.	612.2	569.6	511.6	482.5	392.4	425.5	447.5	486.1	501.8	520.5
3.....	496.5	500.9	507.9	496.9	533.9	481.2	427.3	372.1	334.7	274.1	306.4	326.4	421.4	450.4
4.....	345.5	367.3	357.	416.4	454.2	481.2	515.3	548.2	593.5	602.8	635.2	656.7	497.8	518.7
5.....	685.5	674.2	692.3	706.4	727.4	723.5	680.5	685.8	689.3	686.2	688.7	695.2	692.8	691.2
6.....	787.5	760.5	785.5	770.7	761.1	734.8	650.2	605.5	567.3	575.3	610.9	645.4	687.9	686.2
7.....	663.2	714.7	753.5	747.6	778.2	766.7	730.4	699.1	651.1	589.2	529.2	545.4	681.9	685.3
8.....	588.2	562.7	.....	559.	593.1	560.1	519.3	517.4	493.6	492.	485.5	530.6	582.	554.7
9.....	537.4	550.	563.3	557.1	562.6	515.6	475.2	434.5	401.8	389.3	391.5	397.8	480.5	507.7
10.....	439.7	453.	432.1	475.3	522.7	511.2	491.9	442.7	420.5	414.	411.6	468.8	455.4	486.
11.....	438.5	495.2	489.6	501.9	546.9	615.8	604.2	594.9	579.6	568.7	574.6	543.	550.2	589.5
12.....	294.7	327.4	347.2	375.8	384.6	350.6	324.3	280.8	235.4	252.5	290.9	317.	315.1	362.5
13.....	350.3	397.5	431.4	469.3	485.3	485.	436.4	392.8	339.6	321.3	1306.2	301.6	376.4	415.7
14.....	298.7	291.6	292.5	290.1	309.2	286.2	354.7	381.9	398.2	343.	392.	419.7	337.9	381.
15.....	439.2	457.8	480.1	439.1	497.1	500.7	424.2	483.7	472.6	541.	599.4	598.7	490.3	515.6
16.....	629.9	630.4	680.8	726.5	758.1	741.3	682.6	691.9	685.9	700.2	744.5	786.1	705.5	709.5
17.....	803.9	792.2	836.5	771.9	824.4	703.1	752.5	762.	770.5	760.7	784.1	797.	773.2	764.5
18.....	745.3	595.3	285.5	443.7	614.	672.5	844.5	.....	.....	760.6	735.8	739.2	643.7	641.8
19.....	732.2	732.7	741.4	780.6	742.5	709.1	678.6	652.9	617.6	580.9	605.7	604.2	677.4	686.1
20.....	630.2	642.	687.1	698.7	700.9	692.2	674.2	646.3	652.9	613.6	651.6	743.3	669.	674.
21.....	645.5	604.4	613.7	609.8	600.3	639.1	589.6	580.8	549.2	534.6	560.9	613.6	591.9	605.
22.....	642.3	678.6	734.8	782.	810.5	789.	754.7	745.9	709.8	781.6	749.7	779.2	741.8	736.5
23.....	795.4	828.5	815.3	832.9	847.	812.9	784.2	756.6	705.6	695.7	633.1	653.8	763.4	759.4
24.....	807.7	834.6	850.5	857.4	871.	809.8	745.9	642.	569.9	614.8	.....	.....	760.4	740.8
25.....	713.7	702.7	689.8	609.4	659.6	682.6	691.5	632.	575.1	722.7	596.7	638.2	654.1	661.5
26.....	629.8	669.4	691.	697.4	708.	689.3	641.	631.8	616.4	619.6	661.4	665.3	659.3	673.4
27.....	650.5	551.5	598.1	634.5	658.	601.5	566.	579.7	582.	525.7	613.7	606.5	599.6	617.1
Means.....	569.1	576.9	583.	598.8	628.	611.	592.3	559.8	539.5	544.5	564.1	575.1	576.11	.....
Reduced to 32° F.	567.8	592.2	598.8	609.4	636.8	630.4	606.4	573.9	560.7	565.7	574.4	593.5	.....	590.93

As before. * 7m. late. ** 7m. late.
 Note.—The time of oscillation of the bar in this magnetometer in the magnetic prime vertical, which, in July, 1840, was 11.35. at 70° Fahrenheit, was, in February, 1841, 12.99. at 31° 5 Fahrenheit. The place of observation was the same at both times.

[1840.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

December.]

	h. m. 5 57½ 0 17	h. m. 7 57½ 3 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.
Göttingen time.....													
Observatory time.....													
Dec. 1.....	48.8	46.	44.3	42.6	41.6	40.6	40.2	41.3	42.2	41.8	40.9	39.8	42.5
2.....	38.6	37.8	36.7	35.8	35.	35.	37.	38.7	40.7	40.6	40.6	40.	38.
3.....	39.3	39.1	38.2	38.1	37.8	38.5	40.4	42.5	44.7	46.1	46.	45.3	41.3
4.....	44.	43.3	42.2	41.4	39.6	38.2	37.8	37.	36.7	35.7	34.6	34.	38.7
5.....	33.3	32.6	31.4	31.	30.4	30.5	31.	31.5	31.8	32.1	31.7	31.	31.5
6.....	29.8	30.3	30.2	30.	30.	30.	32.2	34.	35.	35.2	34.3	33.7	32.1
7.....	.....	.....	.....	.....	29.	29.	30.5	32.	33.	36.	37.7	37.5	33.1
8.....	38.	38.2	.....	.....	37.5	38.	39.	39.7	40.3	41.8	41.5	39.5	38.3
9.....	39.2	38.7	38.4	38.3	38.3	39.3	40.2	41.7	42.8	43.7	44.	44.	40.7
10.....	43.2	42.3	41.1	40.1	38.5	39.	40.6	42.5	44.	44.4	43.8	41.3	41.8
11.....	40.3	38.7	37.	35.6	35.	35.	36.4	38.	39.	40.2	41.	41.8	38.2
12.....	48.1	47.3	46.3	45.4	45.4	46.	47.	48.	49.3	49.	47.8	46.8	47.2
13.....	45.8	44.7	43.2	42.2	41.4	41.5	42.8	44.8	46.3	47.	47.5	47.7	44.6
14.....	48.	48.1	47.9	47.9	47.9	48.5	45.8	45.5	45.	45.6	44.2	43.3	45.8
15.....	42.9	41.8	40.8	40.2	39.	39.	40.	40.5	41.	39.8	38.8	38.	40.1
16.....	36.	35.	33.9	33.	32.	32.	33.4	34.	34.9	34.4	31.5	30.1	33.3
17.....	29.1	28.1	28.	27.	26.3	30.	30.	30.6	31.	30.5	30.	29.6	29.2
18.....	30.4	30.7	30.1	29.7	29.	30.	32.	.....	.....	34.9	34.1	33.5	31.4
19.....	33.	33.	32.9	32.9	32.8	33.	35.	36.	37.3	37.8	37.	36.5	34.8
20.....	35.	34.2	33.9	31.9	31.	32.	33.	33.	34.1	36.	36.	35.8	33.6
21.....	36.	35.2	35.2	35.1	35.	35.	36.	37.	38.4	38.	37.	36.	36.2
22.....	34.2	32.2	32.7	29.	28.3	28.4	29.	30.	30.8	30.5	30.	29.	30.3
23.....	28.8	28.1	28.	27.9	26.5	27.8	30.	32.	33.3	34.3	35.	35.3	30.7
24.....	28.7	27.8	26.9	26.3	26.	27.	29.2	31.7	.....	33.5	.....	32.	25.7
25.....	32.2	31.7.	31.	30.7	30.5	32.	34.6	36.5	38.	39.	38.4	37.7	34.4
26.....	37.	36.	35.	34.7	34.7	35.	36.	37.	38.	38.	38.	38.	36.5
27.....	38.	38.	37.9	36.	37.7	38.	39.3	41.	42.	41.5	40.8.	39.6	37.6
Means.....	38.	36.9	36.1	35.4	34.5	35.	36.2	36.2	38.6	38.8	38.5	37.9	36.75

Degrees Fahrenheit.

December.]

HORIZONTAL FORCE MAGNETOMETER.

[1840.

[97]

41

Göttingen time. Observatory time.	h. m. . 6 02½ 0 22	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	Means.	Reduced to 32° F.
Dec. 1.....	825.8	794.	789.	775.3*	793.7	808.4	812.7	796.4	769.7	776.4	776.5	778.8	791.4	762.
2.....	775.	772.	765.7	763.3	768.7	785.9	791.8	790.5	799.1	801.2	789.5	810.8	784.	769.9
3.....	808.6	796.9	789.5	792.4	800.3	807.5	821.8	817.5	800.9	807.9	811.6	814.4	805.8	779.9
4.....	819.8	810.9	809.6	794.	804.5	837.9	867.9	815.3	790.6	811.7	794.4	792.	811.5	793.9
5.....	804.5	807.3	798.8	788.	800.9	797.8	802.1	806.5	854.1	808.7	807.8	809.1	807.1	812.9
6.....	*819.	820.4	823.	807.7	803.	815.	828.1	815.2	821.3	826.7	834.8	821.3	818.7	824.1
7.....	.....	.....	802.7	806.1	818.5	838.3	851.5	830.3	814.6	825.5	830.4	836.5	824.2	824.5
8.....	856.6	841.	833.9	832.6	843.5	849.5	847.8	851.2	840.5	852.	859.2	850.6	846.5	827.3
9.....	848.	841.5	838.6	835.7	842.	858.3	859.	844.	841.9	852.7	876.5	894.	852.7	837.4
10.....	846.6	852.8	830.8	835.9	843.9	906.1	878.4	889.7	886.8	883.4	889.6	879.8	867.	840.1
11.....	861.9	890.	845.	838.4	863.6	901.6	918.2	891.4	875.7	940.9	940.8	899.7	888.9	872.3
12.....	890.4	904.7	901.4	894.	892.5	941.4	844.4	908.3	905.	898.3	909.7	911.	900.1	855.6
13.....	895.7	895.3	886.5	878.2	877.7	895.3	912.1	891.3	886.2	884.7	889.1	887.9	890.	853.2
14.....	889.4	884.9	884.1	876.2	883.8	912.8	924.5	896.6	884.	867.8	866.5	878.4	887.4	846.1
15.....	877.5	864.6	859.2	843.3	846.	864.7	906.1	875.2	871.	924.2	919.7	890.7	879.5	858.4
16.....	888.1	862.5	861.3	852.6	854.9	857.3	890.8	868.5	862.6	853.5	854.1	854.1	861.7	862.3
17.....	851.	836.6	833.6	810.	810.6	881.2	898.5	890.3	882.3	887.1	887.8	865.3	865.3	876.7
18.....	1001.9	905.1	866.6	900.2	981.5	1031.2	960.7	971.1	926.3	899.8	883.9	915.2	937.	941.2
19.....	927.9	890.6	876.2	865.	852.6	878.	905.9	895.6	868.	855.7	856.7	851.6	877.	870.
20.....	847.2	834.9	827.6	840.9	818.2	860.4	876.	845.	830.3	832.2	833.1	869.6	844.6	845.2
21.....	870.2	847.2	846.4	841.3	822.2	867.1	875.6	861.6	841.4	847.5	849.1	842.1	850.1	841.8
22.....	837.1	829.8	817.1	809.	810.2	894.6	839.7	832.2	808.4	801.3	811.8	801.3	818.5	828.1
23.....	803.6	804.	801.9	794.6	796.6	810.7	830.9	830.9	805.7	806.7	817.	816.1	809.9	816.3
24.....	797.3	789.4	784.2	772.2	773.2	795.5	832.3	801.	783.6	797.7	.....	.....	792.6	805.7
25.....	829.1	829.1	829.1	791.2	791.2	861.2	839.1	871.1	839.1	858.2	873.4	877.9	849.2	844.4
26.....	860.7	851.5	830.1	811.9	796.2	822.5	836.5	879.	843.6	835.	864.6	860.7	841.	829.5
27.....	863.3	935.5	841.4	844.1	833.7	871.5	903.4	886.7	870.2	873.	882.	852.9	863.1	842.3
28.....	863.6	841.8	832.3	825.8	831.2	857.5	867.2	857.1	844.6	848.7	854.6	853.2	847.25	.....
29.....	840.2	830.9	824.	819.1	825.8	850.8	856.6	842.7	828.	831.8	836.	837.2	.....	886.4

As before.

* Two minutes late.

[1940.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

Dachau]

Göttingen time..... Observatory time.....	h. m.												Means.
	6 02½ 0 22	8 02½ 2 22	10 02½ 4 22	12 02½ 6 22	14 02½ 8 22	16 02½ 10 22	18 02½ 12 22	20 02½ 14 22	22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	
Dec. 1.....	47.	44.9	42.8	41.	40.2	39.6	39.4	40.	40.3	40.2	40.	39.	41.2
2.....	37.	35.9	34.7	33.2	33.	33.6	35.	37.3	39.	39.6	39.3	38.8	38.4
3.....	38.	37.6	36.5	36.1	36.5	37.5	38.3	41.5	43.7	44.9	45.	44.2	40.1
4.....	43.	42.	40.9	39.9	38.5	37.6	37.	36.	36.	34.	33.5	38.	37.5
5.....	32.2	29.2	30.	29.3	29.2	29.5	30.4	30.7	30.9	31.	30.4	29.8	30.3
7.....	28.2	29.	28.9	28.2	28.8	29.	31.3	32.5	33.6	31.5	32.9	30.	30.3
8.....	.....	.....	.....	.....	28.	28.2	30.	31.5	32.6	34.	34.9	36.4	31.9
9.....	35.9	35.9	36.	36.	36.5	37.3	39.	39.7	40.	40.8	40.2	38.7	38.
10.....	38.	37.4	37.	37.	37.3	38.	39.8	41.3	42.5	43.4	43.6	43.4	39.9
11.....	42.1	41.	39.5	38.6	37.9	38.3	39.4	41.	42.4	42.4	41.8	40.	40.4
12.....	38.8	36.9	35.1	37.	33.6	34.	35.6	37.	38.5	39.3	40.	40.8	37.3
14.....	46.8	46.	45.	44.	44.6	45.	45.8	47.	47.5	47.2	46.	45.5	45.9
15.....	44.6	43.2	42.	41.	40.5	40.5	42.	44.	45.5	46.	46.4	46.5	43.5
16.....	46.3	46.8	46.3	46.1	46.3	46.	45.	44.8	44.	43.	43.	42.	44.9
17.....	41.2	40.	39.	38.	38.	38.	38.8	39.4	39.	38.4	37.	36.	38.9
18.....	34.3	34.	33.	31.	31.	31.	32.	32.4	32.	31.4	30.1	29.	31.8
19.....	28.	26.7	26.	25.2	25.6	27.	28.6	29.4	30.	29.5	29.	28.4	27.8
21.....	30.	29.7	29.	28.2	28.3	29.3	31.3	32.3	33.	32.7	32.7	32.3	30.7
22.....	32.3	32.	32.	31.9	32.	32.7	34.3	35.7	37.	36.8	36.2	35.3	34.
23.....	34.	32.8	31.7	30.6	30.	30.	30.5	31.8	31.6	33.	33.	32.5	31.8
24.....	32.5	32.5	32.6	32.7	33.	34.	35.	36.	37.	37.1	36.	34.6	34.6
25.....	33.	31.2	29.4	28.	27.2	27.2	28.	29.	29.5	29.	28.4	28.	29.
26.....	27.5	27.1	26.8	26.8	27.	28.	30.	31.5	32.	32.	34.	34.5	30.
28.....	27.2	26.2	25.5	25.1	25.2	26.2	28.5	30.7	32.	32.3	34.2	34.5	27.9
29.....	31.	30.7	30.2	29.8	30.	31.	34.	35.6	37.2	38.	37.5	37.	33.5
30.....	36.	35.	34.	34.	33.8	34.2	35.	36.	37.	37.3	37.3	37.3	35.6

Decemba.]

TRIPLE OBSERVATIONS.

[1840.

[97]

	Declination.			Vertical force.				Horizontal force.				Tempera- ture Fah- renheit.
	<i>h. m.</i> 13 53½ 8 12	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 07½ 8 27	<i>h. m.</i> 13 50 8 09½	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 14 05 8 24½	<i>h. m.</i> 14 10 8 29½	<i>h. m.</i> 13 55 8 14½	<i>h. m.</i> 14 02½ 8 22	<i>h. m.</i> 14 10 8 29½	<i>h. m.</i> 14 10 8 29½	
Göttingen time.....	462.6	462.6	462.9	408.4	404.	408.5	793.7	793.	793.7	793.9	793.9	40.2
Observatory time.....	463.6	463.3	465.1	611.7	612.2	609.6	768.9	767.9	768.7	768.9	768.9	33.
Dec. 1.....	465.	466.6	465.3	539.9	536.4	536.4	804.1	804.1	800.3	801.7	801.7	36.5
2.....	461.5	462.7	461.2	459.6	454.2	450.9	805.	805.	804.5	808.	808.	38.5
3.....	463.	462.1	463.9	722.9	727.4	727.4	800.9	795.5	800.9	796.8	796.8	29.2
4.....	463.	464.2	464.9	763.3	761.1	753.4	804.4	804.4	803.	801.6	801.6	28.8
5.....	461.7	461.5	461.7	778.5	778.2	780.7	818.	818.	818.5	819.4	819.4	28.
6.....	462.9	463.	462.4	594.7	593.1	591.1	839.	839.	843.5	844.3	844.3	36.5
7.....	463.3	463.	464.1	561.6	552.6	549.6	842.	836.5	842.9	842.9	842.9	37.3
8.....	466.9	467.5	465.7	517.8	522.7	521.5	853.7	853.7	843.9	846.3	846.3	37.9
9.....	446.	445.8	445.8	577.7	545.9	592.9	859.4	859.4	863.6	866.8	866.8	33.6
10.....	463.5	466.	464.5	396.	394.6	387.	891.2	891.2	892.5	895.6	895.6	44.6
11.....	462.3	462.	463.	485.7	485.3	487.8	876.6	876.6	877.7	879.8	879.8	40.5
12.....	466.	465.1	464.1	303.5	309.3	313.3	884.	884.	883.8	883.5	883.5	46.3
13.....	465.9	465.4	466.	492.	497.1	499.7	846.	846.	846.	846.7	846.7	38.
14.....	464.9	465.4	466.	761.4	766.1	765.3	853.4	853.4	854.9	846.6	846.6	31.
15.....	446.3	446.9	448.2	626.3	624.4	617.1	873.3	873.3	873.3	873.3	873.3	25.6
16.....	437.1	436.3	437.9	824.4	824.4	817.1	910.6	910.6	910.6	913.8	913.8	26.6
17.....	419.6	420.1	419.6	625.9	614.	613.6	983.8	983.8	981.5	984.6	984.6	28.3
18.....	454.2	454.5	454.4	744.5	742.5	738.6	853.5	853.5	852.6	851.5	851.5	32.
19.....	452.7	454.3	456.	710.	700.9	704.9	817.3	817.3	818.2	813.	813.	30.
20.....	453.2	453.2	453.2	609.3	609.3	609.3	832.2	832.2	832.2	832.2	832.2	33.
21.....	451.6	453.7	453.4	811.5	810.5	813.1	908.7	908.7	908.7	908.7	908.7	27.2
22.....	452.7	452.6	453.	847.7	847.	845.7	796.6	796.7	796.6	796.4	796.4	27.
23.....	454.3	454.5	455.1	877.5	871.	867.7	773.3	773.3	773.2	773.2	773.2	25.2
24.....	456.2	456.9	454.7	664.5	659.6	657.7	810.4	808.1	810.4	821.2	821.2	30.
25.....	465.7	466.	466.4	709.2	708.	699.3	795.4	795.4	796.2	799.5	799.5	38.8
26.....	462.7	464.7	464.2	661.9	658.	650.6	843.1	843.1	843.7	843.7	843.7	37.

MAGNETIC OBSERVATORY .

AT THE

GIRARD COLLEGE, PHILADELPHIA.

TERM DAY MAGNETIC OBSERVATIONS,

FROM JUNE TO DECEMBER, 1840.

GENERAL NOTES.

The instruments are those previously described in the notes prefixed to ordinary observations. Observations upon term days were commenced in 1839 with the declinometer only. On the term day of May, 1840, all the instruments were mounted, but the vertical force was not permanently adjusted. A remarkable aurora occurred, and, simultaneously, a great magnetic disturbance. I have therefore inserted the record of the observations, though, in reference to the vertical force, the value of the differences on the scale was not ascertained.

The observations of the force instruments are uncorrected for temperature.

MAGNETIC TERM DAY—DECLINATION MAGNETOMETER. [1840.]

Göttingen time...	A. 23 17	A. 0 16	A. 1 19	A. 2 20	A. 3 21	A. 4 22	A. 5 23	A. 6 24	A. 7 25	A. 8 26	A. 9 27	A. 10 28	A. 11 29	A. 12 30	Observatory time.
0.....	631.3	643.6	653.	677.9	647.9	643.6	632.3	671.6	614.4	668.4	666.6	666.6	666.6	666.6	.....19 30
5.....	632.3	651.5	654.4	678.2	658.4	612.3	667.8	674.2	611.8	665.4	662.5	662.5	662.5	662.5	.....24 30
10.....	630.2	650.9	651.4	684.9	663.2	633.9	667.	668.9	615.7	664.8	661.2	661.2	661.2	661.2	.....29 30
15.....	628.2	641.3	654.3	688.4	669.7	644.1	675.9	663.6	621.6	662.7	651.3	651.3	651.3	651.3	.....34 30
20.....	629.5	635.6	646.7	689.6	671.3	646.8	669.6	668.3	623.4	663.3	651.	651.	651.	651.	.....39 30
25.....	628.1	649.7	636.7	687.2	668.5	646.5	669.3	659.5	625.2	668.1	650.4	650.4	650.4	650.4	.....44 30
30.....	624.9	652.1	651.7	680.8	667.5	617.4	663.4	662.5	628.5	671.8	648.8	648.8	648.8	648.8	.....49 30
35.....	634.8	639.7	632.8	681.4	666.3	645.2	668.8	663.7	632.2	669.9	648.1	648.1	648.1	648.1	.....54 30
40.....	624.9	645.	638.7	684.4	669.6	630.1	668.8	665.7	633.2	667.2	647.7	647.7	647.7	647.7	.....59 30
45.....	635.1	651.6	643.9	670.1	639.4	628.7	665.7	663.4	631.	666.2	646.2	646.2	646.2	646.2	.....64 30
50.....	639.9	634.9	645.3	677.3	641.4	649.4	668.8	662.8	621.	664.2	645.9	645.9	645.9	645.9	.....69 30
55.....	646.6	638.4	647.1	675.9	652.9	671.6	670.5	617.1	667.4	661.2	643.6	643.6	643.6	643.6	.....74 30
Göttingen time...	A. 10 4	A. 12 6	A. 13 7	A. 14 8	A. 15 9	A. 16 10	A. 17 11	A. 18 12	A. 19 13	A. 20 14	A. 21 15	Observatory time.			
0.....	642.7	644.5	647.2	646.7	639.8	627.	631.8	620.	625.1	632.9	634.6	.....19 30			
5.....	644.9	644.	647.4	637.2	636.	627.	618.9	620.7	625.7	630.9	634.1	.....24 30			
10.....	646.5	642.	651.3	637.8	636.	625.6	630.8	620.6	625.9	630.8	634.1	.....29 30			
15.....	647.7	640.4	648.8	639.2	635.3	624.9	631.2	621.1	621.4	631.7	633.6	.....34 30			
20.....	649.4	642.1	650.3	642.7	634.1	620.7	620.6	621.	626.8	631.8	635.6	.....39 30			
25.....	650.5	643.3	650.4	641.9	632.4	621.2	619.8	620.7	626.7	631.1	646.7	.....44 30			
30.....	649.9	642.7	652.4	639.9	624.1	621.6	620.7	622.	626.7	631.5	640.1	.....49 30			
35.....	650.4	644.3	654.3	634.6	625.9	621.7	621.4	622.8	628.2	630.9	634.5	.....54 30			
40.....	646.3	644.9	653.1	645.4	625.9	621.6	621.4	623.2	628.	633.3	638.	.....59 30			
45.....	646.4	646.5	653.3	643.6	627.3	621.1	620.4	623.2	628.6	631.3	641.4	.....64 30			
50.....	646.2	646.7	653.8	643.6	628.5	622.7	619.9	623.8	629.3	633.1	646.5	.....69 30			
55.....	646.6	650.6	656.3	646.7	637.9	628.5	621.	624.8	629.5	635.5	652.	.....74 30			

In a subsidiary building. Augmented value of one division, 0'.845.

* 10 P. M. Göttingen time, civil reckoning.

† 1 minute 1 second too slow.

Göttingen time...	h. 22 16	h. 23 17	d. 0 18	d. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time.
m. 2 30.....	495.6	457.1	581.1	673.	704.6	766.2	796.	713.4	688.5	717.6	632.	607.1	m. .....22
12 30.....	516.4	478.6	624.1	669.9	732.9	794.5	865.5	740.2	657.	678.2	622.5	613.	.....32
22 30.....	517.0	462.9	628.	701.4	744.2	788.3	*off.	688.2	662.7	.....	617.8	612.8	.....42
32 30.....	.....	462.4	650.8	732.1	751.7	748.3	1002.7	697.5	721.5	.....	606.4	616.8	.....52
42 30.....	.....	543.4	674.1	686.7	722.4	738.8	878.	682.7	777.4	647.4	608.5	616.6	.....2
52 30.....	555.7	542.5	679.8	705.6	718.4	789.5	762.1	686.2	.....	643.4	609.4	617.8	.....12
Thermometer...	79.6	78.6	77.3	76.9	75.2	74.1	.....	72.2	71.5	71.8	68.8	67.6	Thermometer.

Göttingen time...	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time.
m. 2 30.....	612.0	610.7	610.5	659.6	667.2	697.9	660.9	591.9	577.9	548.2	540.5	500.1	m. .....22
12 30.....	613.5	601.6	601.8	662.9	654.7	690.1	655.	581.4	574.8	548.3	538.4	509.6	.....32
22 30.....	604.8	605.2	597.	662.7	690.2	690.9	654.1	579.4	564.5	551.	538.5	521.2	.....42
32 30.....	606.9	603.7	606.3	665.7	671.9	692.4	641.8	578.	559.3	553.1	547.3	529.9	.....52
42 30.....	609.9	606.4	631.5	657.9	670.3	685.3	627.5	574.7	555.1	551.	536.7	529.3	.....2
52 30.....	609.4	604.4	651.	663.1	668.6	671.8	610.8	578.6	551.2	544.6	513.4	531.4	.....12
Thermometer...	68.1	68.2	68.5	68.6	68.6	69.4	70.4	71.5	72.8	73.9	75.2	76.8	Thermometer.

• Arranged a subsidiary scale.

Instrument as in June.

Göttingen time.	A. 33 16	A. 23 17	A. 0 18	A. 1 19	A. 2 20	A. 3 21	A. 4 22	A. 5 23	A. 6 0	A. 7 1	A. 8 2	A. 9 3	Observatory time.
<i>m.</i>													<i>m.</i>
7 30	— 76.6	— 401.7	— 325.6	— 137.6	+ 193.3	+ 986.7	.....	.....	.....	.....	.....	+ 154.7	..... 23
.....	— 90.4	— 533.4	— 702.	— 127.	174.5	1106.4	.....	.....	.....	.....	.....	139.1	..... 35
17 30	— 93.1	— 781.6	— 475.4	— 55.1	431.5	955.2	.....	.....	.....	.....	.....	130.3	..... 43
37 30	— 90.4	— 938.9	— 333.4	— 68.7	510.4	690.4	.....	.....	.....	.....	.....	115.1	..... 52
37 30	— 182.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	150.8	..... 3
47 30	— 195.	— 780.1	— 192.7	— 54.2	503.5	.....	.....	.....	.....	.....	.....	118.4	..... 12
57 30	— 289.2	— 834.	— 106.6	+ 81.	572.	.....	.....	.....	.....	.....	.....	.....	.....
Thermometer	77.	77.	77.1	77.9	81.	83.	.....	.....	.....	.....	.....	77.9	Thermometer.

[illegible]

* The disturbance having carried the needle out of the field, the sensibility of the instrument was diminished by lowering the centre of gravity. As the twilight faded, an aurora became visible. In the course of the display, there were moving pillars, flashes from a low segment of light in the north, and a beautiful arch nearly or quite at right angles to the magnetic meridian. Pillars of aurora from 9h. 18m. to 10h. 2m., varying in brightness and position; low segment of light to north, continued throughout the appearances; 10h. 5m., an arch forms from east to west; streamers of light, varying in brightness, fading and reappearing from 10h. 30m. to about 11h. 10m.; the brightest flashes at 11h. 6m.

See general notes.

See general notes.

[1940.]

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

JUNE 24, 25.]

Göttingen time...	h. 23 16	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time.
m.	636.1	636.	636.4	640.	643.2	640.1	644.6	645.3	645.	645.9	647.1	648.6	m. 10 30
5	634.3	638.9	638.5	641.3	641.9	642.9	643.6	645.5	645.3	645.7	647.1	648.	11 30
10	634.3	638.5	639.3	642.	640.6	642.6	643.5	646.8	646.	648.5	647.5	648.5	12 30
15	633.6	639.3	640.9	641.9	639.	643.6	643.8	647.6	646.1	648.5	647.8	648.6	13 30
20	634.6	639.	641.1	642.	638.6	641.6	644.3	648.2	645.3	648.3	647.8	649.3	14 30
25	633.4	640.3	641.5	642.5	639.	641.6	647.8	649.	645.3	648.5	647.8	648.5	15 30
30	634.7	639.	642.	642.9	639.	643.2	650.3	648.7	645.3	647.1	648.1	649.1	16 30
35	635.2	637.9	642.	643.4	636.7	643.1	652.5	.....	645.3	646.7	648.1	649.4	17 30
40	634.9	640.	641.8	643.5	636.3	644.	652.7	647.1	645.3	646.9	648.1	649.4	18 30
45	636.1	641.	641.3	643.7	639.8	645.	650.8	646.9	645.5	647.6	648.2	649.2	19 30
50	635.2	640.9	640.7	644.5	640.4	645.3	648.5	645.6	645.7	647.	648.1	650.1	20 30
55	636.8	639.4	640.7	643.9	641.9	645.2	645.7	645.1	645.8	647.1	648.6	649.7	21 30
Göttingen time...	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time.
m.	649.9	652.9	653.3	652.4	647.8	645.8	642.3	642.2	638.1	631.7	629.7	628.7	m. 19 30
5	.....	653.2	653.8	654.	647.1	646.5	641.7	639.8	637.6	631.7	629.9	628.9	20 30
10	650.4	653.4	653.9	653.7	646.2	646.2	641.1	638.4	636.9	630.7	629.8	629.	21 30
15	648.8	654.1	655.7	652.6	646.1	645.1	641.1	641.4	636.	630.3	629.7	628.7	22 30
20	651.1	654.	653.7	651.8	646.3	645.2	640.7	640.4	635.4	630.5	629.8	629.7	23 30
25	651.6	653.4	653.7	651.4	646.2	644.9	641.2	639.3	634.6	630.5	629.7	629.7	24 30
30	651.4	655.5	652.4	651.7	646.4	643.8	640.5	639.1	634.4	629.9	629.	629.3	25 30
35	651.5	655.6	652.7	651.	646.4	643.5	641.2	639.2	634.2	629.9	629.5	629.5	26 30
40	652.	653.7	653.4	651.1	646.6	643.4	641.	638.3	633.8	629.9	628.	629.5	27 30
45	651.5	655.1	653.1	650.4	645.5	642.6	641.2	637.8	633.	629.7	628.1	629.6	28 30
50	652.5	656.1	653.	646.7	645.8	643.5	641.	638.4	633.5	630.2	628.7	629.5	29 30
55	652.9	652.6	653.7	648.3	645.3	643.3	641.1	639.1	632.2	630.4	628.9	629.4	30 30

NOTE.—The declinometer is a subsidiary one, in a building near the observatory.
Angular value of one unit of the scale, 0'.346.
Increasing readings correspond to a decreasing declination.

[1946.

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

JUNE 24, 25.]

Göttingen time.....	<i>h.</i> 23 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.....
<i>m.</i> <i>s.</i>													<i>m.</i>
9 30.....	657.1	664.5	666.4	668.	665.6	671.8	671.3	660.2	662.7	653.5	647.1	643.2	.....23
12 30.....	663.3	663.3	663.7	666.9	671.7	672.6	641.8	662.9	666.5	652.1	646.7	641.2	.....23
23 30.....	664.1	655.2	657.7	665.5	676.7	674.9	638.5	662.4	657.9	650.5	646.1	640.3	.....43
33 30.....	669.3	669.9	669.1	664.6	673.6	678.8	641.7	661.2	666.8	649.6	644.4	640.1	.....43
43 30.....	669.8	666.1	669.9	661.	670.8	680.2	649.1	663.3	655.9	648.2	644.4	638.1	.....2
53 30.....	669.6	660.9	662.9	657.4	670.8	677.3	652.2	662.1	654.8	648.5	644.2	639.9	.....13
Thermometer.....	83.	83.5	83.2	81.2	78.4	76.8	75.9	75.7	75.2	74.7	74.2	73.8	Thermometer.

53
55

Göttingen time.....	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.....
<i>m.</i> <i>s.</i>													<i>m.</i>
9 30.....	636.4	631.8	630.6	639.8	649.3	656.3	677.3	680.8	675.5	691.	680.7	677.7	.....23
12 30.....	637.2	631.	631.8	639.9	652.	660.	678.2	671.5	679.4	686.2	679.2	664.5	.....23
23 30.....	636.5	639.1	632.9	641.3	653.3	664.6	686.	676.1	687.5	692.9	677.	663.2	.....43
33 30.....	636.2	638.9	634.2	643.1	653.5	668.	678.9	677.7	686.7	692.7	683.9	661.9	.....43
43 30.....	632.9	628.4	624.5	645.	654.2	670.4	678.9	677.9	691.9	692.4	675.	679.4	.....2
53 30.....	633.5	639.5	637.4	646.6	656.6	671.8	681.1	678.1	687.1	692.6	677.2	676.4	.....13
Thermometer.....	73.3	73.9	74.9	75.9	77.3	78.9	79.9	81.2	82.5	83.7	84.9	85.8	Thermometer.

Value of the unit of the scale, — 0.000,140.
Approximate correction for 1° Fahrenheit, — 3.2 divisions of scale.
Increasing readings correspond to a decreasing force.

[1840.

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

JUNE 24, 25.]

Göttingen time.	<i>h.</i> 22 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i> 7 30	407.2	439.5	460.8	464.3	431.4	487.2	592.4	602.2	519.7	561.6	544.3	553.9	<i>m.</i> .....27
17 30	438.5	459.	460.4	517.3	536.5	546.1	565.2	568.2	536.7	553.4	541.9	548.6	.....37
27 30	.....	445.7	464.8	491.8	509.8	531.7	597.2	594.	548.2	555.9	547.6	546.	.....47
37 30	.....	446.6	455.4	450.	546.7	563.8	588.5	556.	555.7	546.3	547.7	550.5	.....57
47 30	.....	474.2	457.5	480.1	499.9	536.4	607.4	507.4	550.5	554.6	547.	547.6	.....7
57 30	.....	424.5	456.3	503.9	550.9	513.2	574.5	511.9	558.7	558.8	547.5	577.8	.....17
Thermometer.	82.1	82.5	81.9	81.8	82.6	81.9	82.1	82.5	83.	82.5	82.	82.	Thermometer.

Göttingen time.	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i> 7 30	552.9	505.	488.7	513.9	412.	499.7	488.1	487.4	496.3	492.3	488.6	530.8	<i>m.</i> .....27
17 30	540.3	490.3	509.4	471.5	463.7	493.9	493.9	489.2	485.4	488.6	485.1	502.	.....37
27 30	550.8	516.1	499.4	464.2	472.5	493.5	494.8	487.	494.4	491.9	492.7	500.4	.....47
37 30	547.4	529.9	509.1	467.7	478.6	497.6	493.2	490.2	489.4	491.5	512.1	512.3	.....57
47 30	558.6	528.7	497.8	464.6	493.	491.4	492.1	495.	495.9	494.6	493.5	516.1	.....7
57 30	512.5	507.4	495.2	462.5	493.5	499.	493.7	490.7	489.6	488.1	497.2	516.6	.....17
Thermometer.	81.5	81.	81.	82.	82.	82.	82.	82.	82.1	82.5	84.	84.	Thermometer.

Value of the unit of the scale, 0.000,016.
 Corrections for 1° Fahrenheit, 3.12 divisions of micrometer.
 The apparent position of the north end of the needle is registered + ; when apparently above the fixed line, + ; when apparently below, —. Increasing + readings correspond to an increase of force.

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

Göttingen time	A. 23 16	A. 0 18	A. 1 19	A. 2 20	A. 3 21	A. 4 22	A. 5 23	A. 6 24	A. 7 25	A. 8 26	A. 9 27	Observatory time.
0	491.7	493.6	494.2	496.9	495.2	501.7	510.7	508.2	492.3	515.	516.7	m.
5	492.2	493.7	494.5	496.6	496.3	506.9	509.1	508.9	495.9	517.1	509.9	19 30
10	493.0	492.6	494.0	496.1	496.7	513.2	509.1	509.1	500.4	517.1	508.9	24 30
15	492.6	492.7	494.6	494.9	496.8	521.4	505.2	509.6	504.6	519.9	508.6	29 30
20	492.9	492.2	495.1	494.	496.6	527.4	506.4	510.1	507.1	523.6	508.8	34 30
25	498.8	493.1	496.2	493.9	496.8	529.3	506.1	509.5	506.3	520.5	509.5	39 30
30	493.2	492.7	497.	493.5	497.3	524.	504.2	507.6	503.3	520.9	507.8	44 30
35	493.2	492.5	496.4	494.7	498.4	519.1	505.4	501.8	502.1	520.9	505.9	49 30
40	490.	493.2	496.2	.....	498.4	516.	503.9	500.4	501.5	520.	505.1	54 30
45	490.5	492.5	496.2	493.6	499.5	513.	505.3	498.5	505.2	520.	506.	59 30
50	490.8	493.1	495.5	494.3	499.3	510.3	504.6	495.1	507.7	518.1	507.	9 30
55	491.3	493.7	496.	494.5	502.2	511.2	506.7	496.7	511.2	515.7	507.3	14 30

55[illegible]

All the instruments in the observatory.

Increasing readings correspond to decreasing declination.

Angular value of one division of the scale, 0'.453.

Göttingen time....	h. 23 16	h. 23 17	h. 0 18	h. 0 19	h. 1 20	h. 2 21	h. 3 22	h. 4 23	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time. m.
8 30.....	779.9	785.	800.4	795.1	796.7	787.1	815.	855.	855.8	855.8	896.	815.1	836.3	.....33
13 30.....	778.4	786.7	800.1	794.5	791.	787.8	835.8	860.	854.6	811.	822.5	822.5	826.8	.....33
23 30.....	776.5	786.2	797.8	794.3	794.7	791.5	834.1	862.8	854.7	800.2	822.4	822.4	818.	.....43
33 30.....	777.6	793.4	798.4	793.7	792.7	793.8	827.7	853.7	835.5	806.2	841.8	841.8	806.	.....53
43 30.....	779.9	796.	797.4	790.	787.1	796.	832.1	848.9	823.2	807.8	846.3	846.3	803.4	.....2
53 30.....	784.	798.1	797.5	790.2	795.2	797.8	839.6	855.2	819.4	807.9	847.7	847.7	805.7	.....13
Thermometer.....	81.6	81.6	81.1	80.	79.	78.	77.5	77.5	76.8	76.6	75.5	75.5	75.	... Thermometer.

Göttingen time....	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time. m.
8 30.....	807.7	794.	779.9	795.8	822.6	815.4	824.5	826.1	824.8	831.1	811.5	793.8	.....38
13 30.....	805.	789.8	781.1	799.5	828.5	814.6	832.3	831.2	836.	824.9	808.2	790.7	.....39
23 30.....	798.6	777.2	783.	802.3	825.3	812.5	835.9	832.2	832.8	819.3	800.	787.4	.....43
33 30.....	*789.7	775.6	782.1	805.	831.8	814.1	832.5	826.	833.8	818.7	799.7	783.3	.....53
43 30.....	790.2	772.4	782.1	816.1	825.2	822.1	819.8	823.7	832.8	816.	799.5	779.8	.....2
53 30.....	787.6	774.	788.3	824.9	828.9	820.7	822.8	824.3	826.9	814.3	797.9	776.4	.....13
Thermometer.....	74.5	74.	74.5	74.5	75.7	76.5	77.	77.5	78.	78.	77.5	77.	... Thermometer.

* Three minutes late.

Value of the unit of scale, 0.009,040, in terms of the horizontal force. Correction for 1° Fahrenheit, 3.2 divisions of the scale. Increase of reading towards a decrease of force.

Observations of vertical force not to be relied on.

[1940.

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

August 29, 30.]

Göttingen time. m.	A.										h.										Observatory time. m.									
	23	16	17	0	1	2	3	4	5	23	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11	12
0	491.3	517.7	490.8	488.7	490.	502.4	520.	523.3	524.7	524.3	499.4	499.	514.	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6
5	490.9	511.5	488.9	488.5	501.	505.	523.3	524.7	524.3	499.4	499.	514.	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5
10	490.5	508.	486.	488.3	507.6	523.3	524.7	524.3	499.4	499.	514.	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6	514.5	499.6
15	488.1	505.	488.1	491.2	521.6	520.7	499.7	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6	492.6
20	490.1	496.3	478.1	487.4	549.7	554.3	486.6	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1	485.1
25	493.6	491.9	477.8	483.8	573.1	553.6	495.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7	493.7
30	503.5	486.5	479.	488.	594.5	533.8	510.2	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9	495.9
35	513.3	486.5	481.7	493.3	612.3	502.6	498.3	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8	524.8
40	523.8	488.1	483.	496.9	620.4	507.3	498.3	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2	537.2
45	538.	492.6	485.2	495.5	600.6	518.7	500.1	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4
50	528.2	497.3	487.	494.7	576.6	539.3	505.4	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1	535.1
55	523.6	494.1	485.5	495.8	565.9	537.4	515.8	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1

No change in the instruments.
 An aurora appeared at 20h. 30m. (observatory time) in N. E.; disappeared at 21h. 19m.; re-appearing at 21h. 59m.; at 22h. 9m., streamers moving from E. to W.; light continued in N.; streamers again in N. E. at 22h. 59m. and at 1h. 14m.; after which, the aurora was not observed. See, also, remarks on the horizontal force observations.

August 28, 29.]

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

[1840.]

Göttingen time.....	α	δ	ϵ	ζ	η	θ	ι	κ	λ	μ	ν	ξ	π	ρ	σ	τ	υ	ϕ	χ	ψ	ω	Observatory time.
22	23	17	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
16	17	18	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
22	23	17	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
16	17	18	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
22	23	17	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
16	17	18	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
22	23	17	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
16	17	18	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
22	23	17	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
16	17	18	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
22	23	17	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
16	17	18	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
22	23	17	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
16	17	18	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
22	23	17	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
16	17	18	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
22	23	17	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
16	17	18	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015.8	1063.	896.7	985.5	973.	932.	974.	974.	974.	974.	974.	974.	974.
22	23	17	865.2	901.6	869.8	895.4	836.	929.2	1024.7	1015												

[illegible]

NOTES.—The observed numbers of the horizontal force instrument have been corrected, the mirror having been deranged on the 27th of August. See note to horizontal force, daily observations, for August, 1840.

(1940

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

August 28, 29, 1

Gottingen time.....	<i>h.</i> 33 16	<i>h.</i> 23 17	<i>h.</i> 0 19	<i>h.</i> 1 19	<i>h.</i> 20	<i>h.</i> 3 21	<i>h.</i> 4 23	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3...	Observatory time.
<i>m.</i> <i>s.</i>													<i>m.</i>
7 30.....	0.7	3.1	— 33.7	— 90.	— 76.4	— 352.9	— 432.8	— 342.3	— 108.6	— 383.4	— 150.8	— 57.6	.....37
17 30.....	— 0.7	— 0.9	— 37.4	— 76.	— 85.	— 371.9	— 413.7	— 430.9	— 265.1	— 374.4	— 135.7	— 16.5	.....37
27 30.....	8.1	— 44.6	— 78.	— 84.6	— 41.9	— 400.9	— 386.	— 216.5	— 307.6	— 319.5	— 176.8	— 0.5	.....47
37 30.....	28.8	— 16.1	— 70.1	— 109.5	— 97.9	— 498.9	— 458.8	— 37.8	— 307.3	— 291.2	— 176.3	17.4	.....57
47 30.....	6.5	— 69.4	— 52.3	— 117.9	— 325.7	— 346.	— 398.5	— 70.9	— 343.2	— 187.7	— 196.8	56.4	.....7
57 30.....	53.6	— 12.5	— 104.6	— 99.8	— 218.8	— 407.5	— 366.3	— 232.4	— 365.4	— 155.8	— 144.2	57.9	.....17
Thermometer.....	77.	77.3	77.8	77.6	77.5	77.2	76.8	76.	75.7	76.	75.7	76.8	..Thermometer.

32

Gottingen time.....	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15...	Observatory time.
<i>m.</i> <i>s.</i>													<i>m.</i>
7 30.....	59.3	56.1	50.7	58.2	34.7	89.1	11.7	10.3	— 12.2	— 5.1	— 28.2	— 29.6	.....37
17 30.....	32.7	56.2	27.3	61.2	50.2	88.5	30.1	— 6.4	6.7	6.	— 9.9	— 47.7	.....37
27 30.....	13.8	60.3	26.1	57.7	45.4	32.5	— 4.7	— 41.	— 3.7	13.9	— 30.	— 49.5	.....47
37 30.....	62.6	61.	147.4	76.9	28.2	18.4	9.	— 16.6	— 0.8	— 12.5	— 42.3	— 52.8	.....57
47 30.....	46.1	69.	87.1	44.5	68.5	8.4	19.8	4.	6.5	— 21.1	— 31.	— 53.9	.....7
57 30.....	20.9	69.1	44.6	16.2	60.7	— 11.6	32.7	9.7	31.5	— 38.6	— 13.6	— 35.9	.....17
Thermometer.....	74.1	74.6	74.	73.8	73.8	75.	75.3	76.2	76.5	77.2	78.	78.5	..Thermometer.

[37]

NOTE.—The fixed hair of the right hand microscope was moved by one of the observers on the July term day, and the observed numbers from that date to September 12th, inclusive, have been corrected for the error thus occasioned.

[1840.]

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

SEPTEMBER 23, 24.]

Göttingen time...	<i>h.</i> 23 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i>													<i>m.</i> 19 30
0	507.2	509.	480.6	484.	502.9	489.6	481.	486.4	485.2	483.4	483.5	489.4	19 30
5	508.	504.4	480.6	485.2	500.2	490.4	487.	487.4	484.	480.6	483.8	487.4	24 30
10	511.1	498.2	482.2	486.3	505.3	488.3	487.6	487.6	482.8	478.2	483.2	485.6	29 30
15	510.9	495.2	481.7	490.4	500.7	484.9	481.7	489.6	485.6	477.6	485.3	482.	34 30
20	511.5	492.5	481.4	492.4	496.9	484.	489.2	489.7	481.4	477.1	485.7	480.5	39 30
25	512.1	490.8	482.2	496.4	493.2	483.5	480.9	487.	482.8	474.4	486.4	477.	44 30
30	517.6	489.8	483.5	497.3	501.2	484.5	482.4	484.8	485.4	475.9	487.	474.7	49 30
35	522.	486.8	482.5	499.6	496.7	483.9	480.6	484.5	482.6	478.9	486.9	474.9	54 30
40	526.7	482.6	481.7	508.2	493.9	477.3	478.6	486.9	476.	478.9	486.8	475.6	59 30
45	525.1	481.1	481.5	511.7	493.2	473.7	479.1	488.1	474.8	479.9	487.9	474.	4 30
50	530.2	480.7	481.5	512.4	491.9	473.8	481.2	486.7	477.	479.6	490.4	472.3	9 30
55	513.7	480.4	482.1	509.2	490.2	470.2	484.8	485.5	481.	482.1	490.5	470.8	14 30

Göttingen time...	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i>													<i>m.</i> 19 30
0	472.6	455.8	478.7	461.3	488.1	476.1	471.	472.1	474.2	475.6	477.8	498.6	19 30
5	472.1	460.4	467.8	461.7	483.	472.7	468.2	472.1	473.6	473.9	479.5	496.2	24 30
10	472.6	465.1	468.1	465.5	480.8	469.1	469.3	473.4	473.9	476.	480.8	497.2	29 30
15	470.5	471.7	469.2	466.6	479.7	468.	467.9	474.6	474.1	473.9	481.6	491.4	34 30
20	467.9	471.7	465.3	469.2	483.6	470.9	466.2	474.3	474.4	475.	482.8	491.2	39 30
25	464.2	472.1	460.5	474.1	483.5	470.	465.9	473.6	474.4	475.9	489.9	489.9	44 30
30	460.4	474.6	459.	478.1	486.1	468.3	463.	473.6	475.3	474.6	490.9	488.6	49 30
35	459.5	473.2	457.7	480.5	486.5	466.3	463.	473.9	475.3	473.7	492.3	486.9	54 30
40	456.4	472.3	456.	483.7	484.6	465.8	464.1	473.9	475.1	474.8	493.8	486.9	59 30
45	455.5	472.7	461.5	486.4	482.3	467.4	469.	478.8	474.3	475.1	495.2	487.7	4 30
50	453.1	468.5	462.7	488.2	481.8	469.5	472.1	475.	473.	476.2	497.6	488.1	9 30
55	453.9	466.1	461.3	487.2	476.1	469.5	471.9	474.4	473.2	476.9	498.7	488.3	14 30

No change in the instrument.

[1840]

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

SEPTEMBER 30, 24.]

Göttingen time	<i>h.</i> 23 16	<i>h.</i> 23 17	<i>h.</i> 0 19	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i>													<i>m.</i>
2 30	841.7	808.3	873.4	854.5	838.4	876.3	838.6	844.	880.8	887.	846.4	855.3	.....32
12 30	865.9	897.3	859.3	869.1	862.8	878.6	819.2	854.7	868.6	873.2	853.4	871.9	.....32
22 30	892.3	893.4	863.3	878.4	860.5	881.5	821.8	849.3	863.6	869.9	850.8	868.4	.....42
32 30	890.4	881.6	853.3	867.	851.7	.....	813.1	866.7	855.5	864.8	843.5	886.4	.....52
42 30	878.5	877.4	861.6	836.3	867.3	856.5	821.8	875.5	872.5	855.7	839.9	906.9	.....2
52 30	898.1	875.3	861.7	899.5	867.8	851.7	832.6	879.6	863.1	853.6	843.5	894.212
Thermometer	64.5	64.8	65.	65.	64.7	64.3	63.6	63.2	62.8	62.	61.6	60.9	Thermometer.

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Göttingen time	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i>													<i>m.</i>
2 30	877.5	824.9	853.6	861.2	863.9	935.3	937.6	898.2	877.9	882.2	864.3	839.4	.....32
12 30	868.3	831.	858.7	847.3	907.5	903.7	928.6	893.6	870.8	882.3	864.2	862.1	.....32
22 30	860.6	832.7	860.	849.7	913.1	936.3	933.9	878.4	870.7	871.8	878.1	866.1	.....42
32 30	860.5	824.7	867.5	847.	907.4	903.8	935.1	871.5	870.6	861.5	863.3	871.	.....52
42 30	840.	830.2	862.4	845.6	903.9	915.4	939.6	873.9	873.3	891.4	883.1	866.4	.....2
52 30	833.5	853.1	858.2	859.9	937.5	933.7	914.1	879.5	884.6	884.2	851.	867.9	.....12
Thermometer	60.4	60.	60.	60.	60.	61.	63.	63.	64.5	66.	67.	68.	Thermometer.

No change in the instrument.

[97]

SEPTEMBER 23, 24.]

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

[1940.

[97]

Göttingen time	<i>h.</i> 23 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i> 7 30	280.3	248.7	151.8	113.3	100.2	139.7	133.	120.1	132.2	172.6	201.	125.	<i>m.</i> .....27
17 30	180.	228.5	139.4	123.1	121.5	84.6	157.3	79.2	114.1	249.4	210.8	135.5	.....37
27 30	310.9	208.8	135.	115.5	130.1	83.5	139.3	81.6	110.	246.3	188.4	138.3	.....47
37 30	236.1	162.5	95.9	139.8	122.3	108.	136.5	95.7	154.4	243.9	200.6	146.8	.....57
47 30	246.6	175.	86.6	139.3	145.9	150.1	101.	132.7	107.6	202.8	194.5	68.7	.....7
57 30	280.1	165.7	97.3	63.3	126.5	146.2	107.2	75.	126.	179.	194.5	32.3	.....17
Thermometer	65.3	66.5	67.	67.	67.	67.	66.5	65.8	65.5	64.7	64.5	63.8	Thermometer.

62

Göttingen time	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i> 7 30	103.9	58.3	.....	—	199.	150.1	149.3	128.1	44.3	137.4	78.1	49.9	<i>m.</i> .....27
17 30	172.7	57.6	160.6	132.6	110.8	135.7	121.3	178.9	79.5	103.2	67.4	14.2	.....37
27 30	162.8	124.2	78.2	143.1	167.1	148.	156.8	125.6	197.	51.9	10.2	7.4	.....47
37 30	164.5	97.2	42.1	—	147.	186.5	117.9	109.4	103.9	48.6	34.2	96.4	.....57
47 30	60.6	30.2	—	31.5	116.3	118.1	154.8	88.5	107.4	58.7	93.	44.	.....7
57 30	106.1	2.8	0.4	156.1	156.2	156.2	130.5	98.3	49.4	95.7	33.1	—	.....17
Thermometer	63.2	62.8	65.	63.	62.4	62.6	63.4	64.7	66.	67.	68.2	69.4	Thermometer.

No change in the instrument.

[1840.]

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

October 21, 52.]

Göttingen time...	h. 23 16	h. 23 17	h. 0 16	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3...	Observatory time. m. s.
0.....	460.7	469.6	465.4	468.4	473.4	476.3	495.3	472.7	477.1	474.7	479.5	454.7	.....19 30
5.....	461.	466.	466.7	462.6	473.5	479.1	491.	469.1	477.4	474.8	475.3	457.3	.....24 30
10.....	461.	467.4	468.2	462.7	474.2	470.3	485.3	471.1	477.5	474.3	474.	462.	.....39 30
15.....	461.	468.7	469.7	460.8	475.	468.7	481.4	476.5	477.2	473.9	473.8	464.1	.....34 30
20.....	461.3	471.8	473.5	461.7	474.3	470.9	467.7	480.8	477.4	475.6	468.8	466.1	.....39 30
25.....	460.3	469.8	473.3	460.6	472.2	474.8	454.5	481.1	477.1	475.9	464.7	469.1	.....44 30
30.....	461.5	468.8	478.9	479.7	472.6	477.9	447.4	480.7	477.2	477.1	462.7	469.9	.....49 30
35.....	466.3	469.2	473.9	479.4	474.7	476.3	464.4	479.	476.6	478.3	462.1	470.1	.....54 30
40.....	471.5	468.3	478.3	478.3	477.6	477.9	461.9	477.9	477.3	478.9	461.5	471.8	.....59 30
45.....	477.	*465.1	484.6	477.	478.5	477.4	469.1	477.8	475.9	479.2	459.3	476.	.....4 30
50.....	475.9	465.	487.	477.	482.6	477.5	471.5	477.7	475.3	478.9	458.1	474.5	.....9 30
55.....	471.7	465.3	485.7	474.8	478.5	488.2	471.9	478.	475.5	479.8	455.3	474.3	.....14 30

63

[97]

Göttingen time...	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15...	Observatory time. m. s.
0.....	473.7	474.9	479.	480.9	484.2	480.1	472.8	462.4	466.7	466.9	464.5	464.7	.....19 30
5.....	473.1	474.5	475.5	482.5	494.4	478.9	471.4	462.	464.9	466.8	464.9	464.1	.....24 30
10.....	472.	475.1	477.	482.3	486.7	476.4	468.7	462.1	465.2	467.4	464.1	464.7	.....39 30
15.....	472.3	474.5	477.6	483.	485.7	476.8	466.8	462.	466.	467.8	464.3	465.3	.....34 30
20.....	472.9	474.4	478.2	480.8	486.1	476.6	466.6	463.5	465.6	468.	464.1	466.1	.....39 30
25.....	473.3	475.	478.	482.5	485.4	475.9	467.6	463.8	464.2	467.6	464.1	466.1	.....44 30
30.....	473.	475.5	478.9	483.8	486.6	472.3	466.5	464.3	466.5	468.9	463.9	467.	.....49 30
35.....	473.6	475.8	478.7	483.1	486.1	471.1	467.5	464.1	467.7	466.9	464.	468.	.....54 30
40.....	473.9	475.1	479.	484.4	485.3	472.3	466.7	464.4	467.6	466.	463.9	468.4	.....59 30
45.....	474.4	475.9	478.6	484.8	482.3	473.8	466.4	465.4	468.7	468.8	463.9	468.8	.....4 30
50.....	474.7	476.	479.7	484.3	482.7	473.7	465.3	466.5	468.1	465.9	463.7	469.9	.....9 30
55.....	474.8	477.3	479.8	485.6	481.6	472.5	464.5	467.7	467.5	464.6	463.5	470.7	.....14 30

No change in the instrument.

* Two minutes late.

Göttingen time.....	<i>h.</i> 23 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	<i>h.</i> 10 4	Observatory time.
<i>m.</i> 25 26 27 28 29 30	897.7 889.1 899.5 898.9 898.5 893.5 874.3	872.5 890.5 887.1 870. 875.5 866.8	893.7 888.7 888.1 896. 887.3 876.5	888.8 890.1 891.3 894.6 884.2 886.1	890.8 904.8 897.2 910.5 894.6 872.1	872.3 861.3 897.2 896.2 897.7 872.4	830.8 817.3 808.3 879.1 881.2 869.3	872.1 897.9 890.9 885.4 884.1 876.5	876.2 882. 886.4 881.6 883.7 880.4	875.1 874.5 877. 877.1 872.9 871.2	868.5 880.3 891. 885.4 898.4 877.9	861.4 847.9 844.4 847.7 855.1 847.8	861.4 847.9 844.4 847.7 855.1 847.8	<i>m.</i> 22 23 24 25 26 27 28 29 30
Thermometer	62.	62.3	62.7	63.	63.	63.	63.3	63.5	63.7	63.6	63.3	63.1	63.1	Thermometer.

Göttingen time....	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15...	Observatory time.
<i>m.</i> 2 30	853.6	848.4	840.4	851.3	848.7	879.1	931.6	924.4	887.1	863.4	862.2	874.9	<i>m.</i> .....32
12 30	858.8	845.	847.7	848.4	849.3	890.3	938.7	932.7	879.	855.2	861.7	870.	.....32
32 30	855.1	840.9	844.4	852.1	846.3	892.6	947.	911.2	879.1	850.4	862.	861.5	.....42
32 30	853.4	840.4	847.	850.1	860.1	895.2	934.9	913.1	878.2	855.1	862.	865.3	.....2
42 30	853.5	843.7	846.7	848.1	853.6	904.4	928.1	912.4	862.7	856.5	869.2	864.3	.....2
52 30	849.2	849.4	848.3	849.6	870.1	919.4	935.9	886.5	856.6	860.	868.	857.4	.....12
Thermometer....	62.8	62.	61.	60.9	60.4	59.7	59.	58.8	56.5	58.6	58.7	58.9	Thermometer.

No change in the instrument.

[illegible]

Göttingen time.	h.	h.	k.	h.	h.	'h.	h.	h.	h.	h.	h.	h.	Observatory time.
10 4	10 5	11 5	12 6	13 7	14 8	15 9	16 10	17 11	18 12	19 13	20 14	21 15	
79. 39.	—110.5	—81.7	—38.5	—21.4	48.9	42.9	81.9	121.9	180.2	88.4	79.5	85.2	m.
79. 30.	—101.5	—60.5	—36.7	—13.7	50.6	40.9	90.2	126.7	118.7	99.6	82.6	91.9	37.
27 30.	—116.7	—70.3	—35.	—13.6	48.7	53.8	97.2	124.	109.6	97.6	83.7	90.3	37.
37 30.	—81.8	—56.9	—27.8	—52.8	45.1	53.4	109.1	119.7	100.5	99.7	82.4	99.3	47.
47 30.	—79.5	—54.	—18.6	46.5	48.9	56.3	119.5	126.5	94.5	89.6	91.2	112.2	7.
57 30.	—80.4	—58.1	—23.3	51.1	44.4	71.5	123.8	124.8	89.3	89.4	85.4	111.2	17.
Thermometer				63.7	62.	61.5	60.5	60.	60.	60.	60.3	60.8	Thermometer.

No change in the instrument.

*** Two minutes late.**

NOVEMBER 27, 28.]

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

[1840.]

Göttingen time.	λ .	λ .	λ .	λ .	λ .	λ .	λ .	λ .	λ .	λ .	λ .	Observatory time.
...22	23	0	1	2	3	4	5	6	7	8	9	
16	17	18	19	20.	21	22.	23	0	1	2	3...	
...	
...	454.	458.3	460.5	462.4	461.5	460.9	461.3	459.7	461.9	462.5	462.1	...
...	454.	458.8	461.	463.1	460.8	461.5	460.8	460.3	461.7	462.7	462.6	...
...	453.2	459.9	461.4	462.	460.9	461.6	460.9	460.6	461.8	463.6	463.7	...
...	452.7	459.	462.2	462.1	459.6	460.3	460.3	461.1	462.9	463.9	464.	...
...	451.6	458.9	458.1	462.3	461.7	461.3	460.8	461.6	461.2	464.3	464.9	...
...	451.3	458.7	458.5	462.3	461.4	460.4	461.9	462.5	461.8	464.4	463.1	...
...	451.5	459.8	459.7	462.1	462.	460.9	461.3	461.5	462.	465.4	465.4	...
...	452.	459.	460.5	462.5	461.3	461.9	461.4	461.2	461.9	466.2	465.4	...
...	452.6	459.6	460.	462.8	461.	461.1	460.9	462.4	462.3	460.	467.	...
...	453.2	459.8	459.5	462.3	461.9	461.4	461.2	462.5	462.1	461.	465.4	...
...	456.	459.	463.	461.1	460.6	461.7	460.6	462.1	462.5	462.1	465.5	...
...	456.1	458.2	459.7	462.6	460.8	461.4	460.2	462.	463.	461.6	466.	...

[illegible]

No change in the instrument.

November 27, 28.]

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

[1940.]

Göttingen time	A. 23 16	A. 23 17	A. 0 18	A. 1 19	A. 2 20	A. 3 21	A. 4 22	A. 5 23	A. 6 0	A. 7 1	A. 8 2	Observatory time
m. s.												m.
2 30	773.3	790.1	781.7	786.2	786.	784.8	780.4	802.4	802.8	793.	792.	789.1
12 30	778.6	787.	777.6	787.3	787.9	794.8	794.4	804.6	801.	793.6	793.1	787.3
22 30	784.7	785.1	777.5	787.7	790.7	790.5	800.1	803.	798.1	796.5	793.1	785.1
32 30	792.7	778.2	776.8	788.2	783.4	794.8	799.8	804.9	801.8	790.7	795.4	791.
42 30	792.8	774.	780.1	787.7	790.3	793.1	803.8	803.2	796.	791.4	797.5	786.3
52 30	791.2	773.7	787.3	785.8	786.3	793.3	798.7	805.1	792.	789.4	792.3	786.9
Thermometer	.....	.....	41.	41.3	41.1	41.	40.5	40.4	40.1	40.	.....	Thermometer.

Göttingen time	A. 10 4	A. 11 5	A. 12 6	A. 13 7	A. 14 8	A. 15 9	A. 16 10	A. 17 11	A. 18 12	A. 19 13	A. 20 14	A. 21 15	Observatory time
m. s.													m.
2 30	789.6	793.3	785.8	781.	801.3	843.5	840.2	853.9	810.	853.3	838.3	833.	789.1
12 30	787.3	794.1	786.	784.9	807.6	846.9	832.3	830.4	812.8	861.4	832.1	831.6	787.3
22 30	787.2	789.6	786.7	798.5	807.6	861.2	838.5	815.4	833.5	844.5	835.4	830.2	785.1
32 30	790.3	786.	788.9	798.3	815.1	872.4	839.1	803.2	844.	848.1	831.7	837.4	791.
42 30	795.3	778.3	786.2	796.2	825.8	870.9	843.2	804.2	852.3	845.9	828.3	824.8	786.3
52 30	793.1	783.5	783.	792.5	836.5	853.4	839.2	819.8	861.2	833.7	825.5	815.6	786.9
Thermometer	.....	.....	39.9	39.9	39.9	39.5	40.	40.5	41.	42.	43.	45.	Thermometer.

No change in the instruments.

[1840.

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

November 27, 28.]

Göttingen time	h. 22 15	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time.
m. f.													m.
7 30	450.1	365.6	386.8	315.4	296.7	393.7	404.2	399.1	426.5	381.7	387.6	373.7	.....37
17 30	447.2	378.9	385.5	314.8	310.3	389.3	401.2	399.6	419.4	389.6	379.7	374.8	.....37
27 30	411.3	373.4	312.9	298.2	309.9	385.8	400.9	344.2	406.1	386.8	383.3	360.3	.....47
37 30	430.4	389.9	311.4	296.8	317.4	386.5	323.5	307.1	418.2	387.2	383.1	392.6	.....57
47 30	391.4	380.3	314.	299.3	312.3	394.5	319.5	348.2	406.5	384.1	387.	381.8	.....7
57 30	398.7	377.9	310.8	324.6	391.2	401.7	319.8	394.5	398.5	383.9	377.2	368.2	.....17
Thermometer	42.	43.7	44.	44.2	44.2	44.	44.	43.8	43.	43.4	43.3	43.2	Thermometer.

Göttingen time	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time.
m. f.													m.
7 30	378.4	391.8	379.1	408.1	442.1	449.2	452.1	398.2	399.7	347.1	370.8	274.	.....37
17 30	396.7	378.7	382.8	404.8	445.8	437.4	421.5	392.9	380.6	369.5	363.4	274.4	.....37
27 30	381.	373.8	384.7	420.8	446.6	432.	430.5	407.6	383.	369.	363.8	259.7	.....47
37 30	381.	368.1	387.6	422.9	446.2	428.1	383.2	401.1	387.2	369.2	336.6	258.9	.....57
47 30	385.4	369.8	402.	428.1	439.7	426.5	399.3	388.	395.8	366.8	386.7	253.8	.....7
57 30	395.2	379.4	406.9	435.5	396.2	423.8	399.5	392.4	383.6	375.1	278.4	259.1	.....17
Thermometer	43.2	43.2	42.5	42.	41.8	42.	42.	42.6	43.1	44.1	45.2	45.8	Thermometer.

No change in the instruments.

[1840.]

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

DECEMBER 23, 24.]

Göttingen time...	A.	h.	A.	h.	A.	h.	A.	h.	A.	h.	A.	h.	Observatory time.
23	16	436.	434.8	435.3	454.3	448.5	454.3	449.1	454.3	439.7	449.	447.8	m.
0	17	435.	436.3	436.8	460.6	438.	453.1	450.9	455.1	445.7	448.1	448.	.....19 30
5		435.2	440.9	438.9	462.3	438.8	446.8	453.3	455.6	449.3	446.6	446.9	.....24 30
10		435.1	442.4	439.8	458.8	439.8	454.6	454.9	457.7	448.7	446.3	447.4	.....29 30
15		433.9	441.7	439.7	455.7	439.2	461.8	455.	457.9	450.9	447.8	448.8	.....34 30
20		433.9	441.7	439.7	455.7	439.2	461.8	455.	457.9	450.9	447.8	448.8	.....39 30
25		435.7	441.1	441.5	452.	439.7	461.4	455.	455.	450.6	449.6	449.3	.....44 30
30		434.9	436.7	439.5	456.5	441.9	460.	454.7	448.1	449.7	449.4	448.9	.....49 30
35		435.	435.8	437.	480.1	439.8	454.9	453.6	443.9	447.5	447.8	449.3	.....54 30
40		435.1	438.4	436.9	459.1	442.7	454.1	454.5	441.	447.6	447.9	449.8	.....59 30
45		435.	441.6	438.5	459.	447.6	456.6	454.3	437.3	448.	451.	449.5	.....4 30
50		433.8	439.6	440.2	451.5	452.	459.3	453.8	432.8	449.	450.	449.6	.....9 30
55		433.4	435.8	444.1	450.7	453.9	448.3	454.2	434.8	448.3	448.4	449.3	.....14 30

69

[97]

Göttingen time...	h.	10	11	12	13	14	15	16	17	18	19	20	21	h.	Observatory time.
10	4	449.1	446.5	444.9	453.1	453.2	455.	450.	446.9	440.	440.1	437.	442.5	442.5	m.
5		449.6	446.6	444.3	454.1	452.8	449.2	449.	446.2	441.3	441.7	437.7	442.5	442.5	.....19 30
10		451.1	445.1	446.1	457.1	455.9	450.6	452.1	447.7	440.1	441.7	437.6	442.	442.	.....24 30
15		453.5	444.1	450.1	456.	456.	452.	450.	446.2	441.2	443.8	437.9	442.6	442.	.....29 30
20		455.7	441.2	449.9	452.3	459.1	453.7	448.4	445.4	440.4	443.5	439.4	444.7	444.7	.....34 30
25		454.5	441.5	449.5	455.2	459.	452.7	449.6	444.1	438.7	442.5	436.8	445.7	445.7	.....39 30
30		452.	443.7	446.8	457.9	456.4	453.1	449.1	444.3	438.8	441.9	439.	446.8	446.8	.....44 30
35		447.1	447.5	446.1	455.2	453.4	454.5	449.4	443.3	439.5	441.3	437.	446.5	446.5	.....49 30
40		444.1	444.6	446.	454.3	453.8	453.6	449.5	444.1	439.9	440.5	438.1	446.5	446.5	.....54 30
45		445.	442.8	448.	450.3	453.2	453.1	448.8	441.6	439.9	440.5	438.8	446.5	446.5	.....59 30
50		446.2	443.5	449.7	450.8	456.1	452.4	447.9	442.3	439.8	439.6	439.5	445.8	445.8	.....4 30
55		447.3	444.2	451.5	451.2	461.5	449.7	448.2	441.5	438.8	438.1	441.9	445.7	445.7	.....9 30
															.....14 30

No change in the instruments.

December 23, 24.]

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

[1840.

[97]

Göttingen time.....	<i>h.</i> 22 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time. <i>m.</i>
<i>m.</i> 2 30.....	830.3	832.4	832.2	849.5	853.1	857.8	869.6	*858.4	870.2	854.3	847.3	843.6	.....22
12 30.....	838.3	849.	826.7	821.9	864.8	868.	860.8	868.4	863.9	859.2	850.9	840.5	.....32
22 30.....	841.7	840.7	829.5	833.1	867.4	853.3	856.5	867.9	827.5	862.5	843.9	844.9	.....42
32 30.....	836.8	838.7	832.2	849.1	853.4	870.6	850.3	867.	816.1	857.3	842.7	839.9	.....52
42 30.....	846.3	842.2	843.2	837.6	879.5	890.5	852.9	868.3	822.4	851.3	848.1	842.8	.....2
52 30.....	855.1	819.9	847.4	846.7	878.3	873.8	854.	847.	848.3	844.7	844.112
Thermometer.....	32.2	31.4	33.	33.	33.	32.6	32.5	32.5	32.5	32.4	32.5	.. Thermometer.

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Göttingen time.....	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time. <i>m.</i>
<i>m.</i> 2 30.....	846.4	849.	841.3	831.6	822.2	840.2	857.1	867.9	875.6	884.3	861.6	892.5	.....22
12 30.....	849.9	852.	845.6	826.9	828.3	847.9	863.6	865.9	862.3	882.5	860.1	861.1	.....32
22 30.....	848.9	859.	835.9	818.7	837.1	850.9	861.8	871.	864.2	868.	878.5	867.3	.....42
32 30.....	848.2	856.8	835.	839.7	827.4	857.3	864.	864.2	894.	871.3	870.7	851.5	.....52
42 30.....	853.8	853.	840.4	825.8	823.5	857.9	864.6	869.8	892.1	866.	885.2	847.4	.....2
52 30.....	846.3	846.1	835.5	.....	842.	863.6	863.4	869.9	891.1	859.1	894.4	848.6	.....12
Thermometer.....	32.7	32.6.	32.7	.....	32.8	33.5	34.	35.	35.1	36.1	37.1	37.7	.. Thermometer.

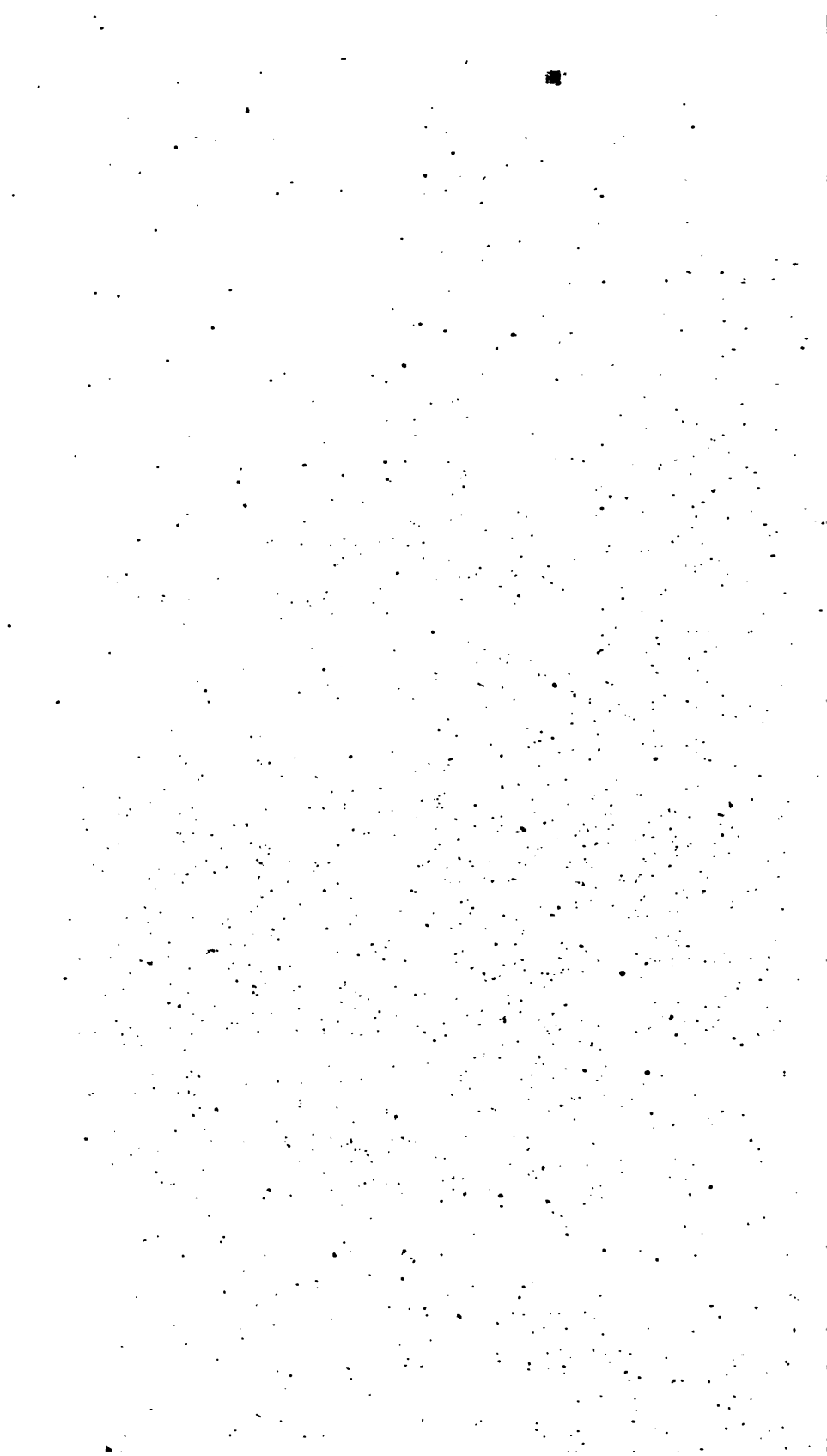
* Five minutes late.

DRESDEN 25, 26.] MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER. [1840.

Göttingen time....	h.		m.		h.		m.		h.		m.		h.		m.		h.		m.		Observatory time.
	23	16	23	17	0	18	1	19	2	20	3	21	4	23	5	6	7	8	9	3...	
m.																					
7 30.....	649.2	606.1	616.1	654.5	670.6	710.9	730.2	730.2	645.4	535.6	604.	608.7	608.7	608.7	608.7	608.7	608.7	608.7	608.7	608.7	.....27
17 30.....	643.	619.8	622.4	643.8	687.5	692.1	723.4	723.4	634.8	543.8	611.1	607.5	607.5	607.5	607.5	607.5	607.5	607.5	607.5	607.5	.....37
27 30.....	630.4	632.8	632.8	632.8	699.3	687.6	694.6	694.6	599.2	599.2	604.9	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	589.3	.....47
37 30.....	623.1	619.8	631.3	642.6	690.5	700.8	690.6	690.6	649.3	592.1	612.7	616.	616.	616.	616.	616.	616.	616.	616.	616.	.....57
47 30.....	617.2	621.5	646.3	642.2	714.5	732.7	679.8	679.8	550.9	532.7	603.4	608.1	608.1	608.1	608.1	608.1	608.1	608.1	608.1	608.1	.....7
57 30.....	612.8	613.6	651.9	651.6	692.7	743.3	690.6	690.6	533.1	604.4	611.6	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7	.....17
Thermometer.....	34.8	36.	36.2	36.	36.	36.	35.3	35.3	35.	35.2	35.1	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	35.2	Thermometer.

Göttingen time.....	h.				h.				h.				h.				h.				h.				Observatory time.
	10	5	6	12	13	7	14	8	15	9	16	10	11	12	13	14	15	16	17	18	19	20	21		
h.	602.9	590.3	611.	606.3	638.5	602.7	622.2	616.4	595.2	593.3	570.2	542.1	542.1	542.1	542.1	542.1	542.1	542.1	542.1	542.1	542.1	542.1	542.1		
m.	7	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7 30.....	602.9	590.3	611.	606.3	638.5	602.7	622.2	616.4	595.2	593.3	570.2	542.1	542.1	542.1	542.1	542.1	542.1	542.1	542.1	542.1	542.1	542.1	542.1		
17 30.....	590.3	605.5	606.3	630.	630.	600.8	608.6	602.7	595.7	587.2	567.2	536.8	536.8	536.8	536.8	536.8	536.8	536.8	536.8	536.8	536.8	536.8	536.8		
27 30.....	593.8	606.9	614.6	616.7	616.7	619.	616.4	610.7	599.	592.9	557.4	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6	539.6		
37 30.....	596.7	611.4	617.2	647.	647.	615.8	621.3	615.9	591.	580.	557.7	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4		
47 30.....	583.1	611.4	615.9	609.1	609.1	623.6	616.7	614.5	587.5	574.5	560.8	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2		
57 30.....	591.9	609.8	619.1	600.3	600.3	616.5	624.6	606.7	596.6	576.9	571.1	540.2	540.2	540.2	540.2	540.2	540.2	540.2	540.2	540.2	540.2	540.2	540.2		
Thermometer.....	35.2	35.1	....	....	....	35.	....	35.1	35.8	36.2	36.9	37.8	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4
... Thermometer.																									

Nera.—The time of oscillation of the bar of this instrument in the magnetic prime vertical was, in February, 1841, 12.03 seconds at the temperature of 31° 5 Fahrenheit. In July, 1840, the time of one oscillation was 11.25 seconds at 70° Fahrenheit; both observations being made in the same building, near the observatory.



MAGNETIC OBSERVATORY,

AT THE

GIRARD COLLEGE, PHILADELPHIA.

ORDINARY METEOROLOGICAL OBSERVATIONS,

FROM JUNE TO DECEMBER, 1840.

GENERAL NOTES.

The time in which the observations are recorded is according to the civil reckoning—the hours being, for convenience, carried forward to twenty-four. The meteorological observations are taken just after the regular magnetic observations, which brings them to nearly twenty-five minutes after the even hours of observatory time, or about six minutes after the even hours of Göttingen time.

The barometer is a cistern barometer, by Fortin, No. 8. The tube is about a quarter of an inch in diameter; the scale of brass divided according to the metre and its subdivisions. It was found to stand, 0.487 millimetre higher than the standard barometer at the Paris observatory. The cistern is—feet above mean tide at the Schuylkill water works. The corrections used for capillarity and temperature are from the report of the Committee of Physics of the Royal Society of London.

The thermometers for the temperature of the air and for the evaporating point are by Greiner, of Berlin, forming Auguste's psychrometer. They are divided on porcelain to half degrees. The scales are enclosed in exterior glass tubes. The bulbs are about four feet above the ground. The instruments are enclosed on the sides by wooden screens, with inclined slats, painted white. An exterior screen further serves to keep off direct and reflected heat.

The force of vapor is calculated from Professor Apjohn's tables, and the table of the force of vapor in the report of the Committee of Physics.

The dew point is observed by Daniel's hygrometer, made by Greiner, of Berlin, and having a gilded band about the bulb, to receive the deposit of moisture.

Saussure's hygrometer, by Fortin, is for comparison. The scale, when first put up, marked less than 90° in air containing the maximum of vapor at about 70° Fahrenheit.

The direction and force of wind and the quantity of rain are taken from a self-registering wind and rain gauge, by Osler, of Birmingham, made by the inventor. The force of the wind is reckoned in pounds to the square foot. The omissions in these columns are from the uncertain action of the instrument when first put up. The extent of sky covered is given in eighths, by estimation. Howard's nomenclature of clouds is used. The direction from which the clouds named are moving is stated.

The following abbreviations are used: Cl. for clear; Cly. for cloudy; Ci. for cirrus; Cu. for cumulus; Ci-cu. for cirro-cumulus; S. for stratus; Ci-s. for cirro-stratus; Ci cu. for cirro-cumulus; Cu-s. for cumulo-stratus; N. for nimbus; Fl. for flying or rapidly moving clouds; Hor. for horizon; Exc. for except. The points of the compass are marked by the usual abbreviations.

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.]

Day.	Date.*		Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Sky covered, eths.	Clouds, &c.
	Hour.	m.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.		
1	0	25	...	...	...	...	...	...	...	...	...	...	...	Dark clouds in N. Hor. [clouds in N. Clear, Exc. few Cu. in S. & SW., with dark Clear, Exc. dark Cu. in N.
	2	25	...	...	...	...	...	...	...	...	...	...	...	...
	4	25	...	...	...	...	...	...	...	...	...	...	...	...
	6	25	...	...	...	...	...	...	...	...	...	...	...	...
	8	25	22.7	759.80	29.800	70.2	...	...	...	76.	...	...	...	Ci. in Hor. N. & E.
	10	25	21.	759.35	29.776	74.6	66.9	...	...	74.	...	...	...	Clear.
	12	25	26.3	758.50	29.733	70.9	68.3	560	...	72.1	...	...	...	Clear.
	14	25	28.5	759.90	29.777	83.7	69.7	563	...	64.5	...	...	...	A little Ci-s. in N. Hor., and a few Cu. in S. Cu-s., with N. in N. & W.
	16	25	30.	757.35	29.670	82.6	70.	587	...	67.4	...	...	...	Cu.; (N.) raining.
	18	25	28.	759.25	29.755	77.5	65.3	489	...	...	...	...	...	Cu.N.; raining, with distant thunder in NW.
	20	25	25.	759.15	29.763	66.	65.1	607	...	77.8	...	...	...	N.; rain.
2	22	25	25.	760.45	29.816	66.9	65.	596	...	83.	...	...	...	N.; rain.
	0	25	23.4	760.50	29.826	68.5	58.4	496	...	85.	...	...	...	N.; rain at intervals.
	2	25	22.5	763.05	29.929	55.2	54.2	421	...	85.9	...	...	...	N.; stormy, rain.
	4	25	21.	761.90	29.991	54.7	53.6	410	...	84.2	...	...	...	N.; ceased rain.
	6	25	19.8	763.15	29.946	54.5	54.	421	...	84.5	...	...	...	N.
	8	25	18.5	763.05	29.949	58.2	55.4	418	...	81.	...	...	...	N.
	10	25	18.5	763.65	29.972	57.7	55.2	418	...	81.5	...	...	...	N.
	12	25	17.8	764.05	29.992	58.3	55.1	408	...	81.	...	...	...	N.; drizzling.
	14	25	17.3	763.50	29.971	57.2	55.9	442	...	82.	...	...	...	N.; drizzling.
	16	25	16.8	763.30	29.966	57.1	54.	392	...	81.5	...	...	...	N.; drizzling.
	18	25	16.1	762.60	29.942	54.4	53.4	408	...	87.	...	...	...	N.; drizzling.
	20	25	16.9	763.30	29.966	54.5	54.2	427	...	87.	...	...	...	N.; drizzling.
	22	25	16.8	761.90	29.912	56.5	56.5	465	...	85.	...	...	...	N.; drizzling.

* The date is according to civil reckoning, the hours being counted from 0 to 24. † Recorded 769.25.
 † Record of the quantity of rain for the month of June imperfect. § Recorded 87.5, which gives force of vapor = .370. ¶ Recorded 67.7.

[June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

[97]

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Day.	Hour.	Barometer.				Therm'rs, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature.	Obs'd height.	Corr. height.		Dry.	Wet.				Dir. points.	Force, lbs.			
3	A.														
	0	25	760.75	29.866		58.1	58.1	.491		84.9?					N.; raining.
	2	25	760.00	29.831		61.	60.5	.526		85.					N.; raining very hard.
	4	25	759.45	29.812		63.6	63.2	.580		84.6?					Cu.
	6	25	759.40	29.808		64.2	63.6	.584		85.1?					Sky clear; slight mist.
	8	25	759.15	29.794		67.4	66.5	.638		85.					
	10	25	758.90	29.780		67.3	65.8	.617		85.					Overcast; clouds breaking away.
	12	25	758.10	29.741		69.8	67.4	.642		84.5?					Sky covered; thunder.
	14	25	757.50	29.718		68.5	67.	.642		85.5?					N.; raining fast.
	16	25	756.95	29.697		65.6	64.7	.602		86.3?					N.; rain hard and incessant.
	18	25	756.55	29.683		64.1	63.5	.580		86.9?					N.; rain hard and incessant.
	20	25	755.95	29.660		63.5	63.4	.586		86.8?					N.; rain hard and incessant.
4	22	25	755.95	29.665		63.2	62.8	.569		86.8?					N.; rain hard at intervals.
	0	25	754.40	29.601		62.6	62.5	.566		87.5					Dark; raining.
	2	25	753.80	29.580		63.2	63.1	.579		87.					Dark; very little rain.
	4	25	753.25	29.558		64.	63.9	.596		87.1					Sky clear; thick fog.
	6	25	753.00	29.560		66.	65.9	.637		87.					Clear.
	8	25	753.05	29.549		67.6	66.9	.651		86.8					Heavy thunder shower.
	10	25	753.90	29.584		62.6	60.6	.532							Thunder storm.
	12	25	752.85	29.538		62.2	62.	.557							Rain; heavy and steady.
	14	25	752.45	29.522		64.8	64.2	.596		81.8?					Rain; not so fast.
	16	25	752.65	29.535		64.2	63.5	.579		82.5					Rain; Cu. and N. floating.
	18	25	752.50	29.529		63.8	62.2	.545		83.1					Rain; Cu. and N. floating.
	20	25	752.45	29.566		62.6	62.9	.570		87.2					N. Cu. floating.
	22	25	753.65	29.571		63.7	63.1	.541		87.					Clear; N. Ci.; Ci-a. in Hor.

• Recorded 60.5.

† Recorded 61.5.

Date.	Hour.	Barometer.			Therm°s, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr. Senses.	Wind.		Rain, inches.	Sky covered, Sds.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimeters.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
5	A. M.													
	0 25	19.7	753.55	29.572	61.9	61.2	.533	...	87.	...	...	...	...	Some Cu. and Ci-cu.
	2 25	19.4	753.95	29.588	60.4	60.2	.525	...	87.2	...	...	...	...	Cu-ci; Ci cu. in Hor.
	4 25	19.3	755.45	29.647	60.5	60.4	.531	...	87.2	...	...	...	...	Ci-cu; fleecy, &c.
	6 25	19.4	756.50	29.686	62.6	60.5	.508	...	85.	...	...	...	...	Clear, Exc. Cu-s. in S. Hor.
	8 25	20.	757.00	29.704	65.5	59.7	.458	...	76.	...	...	...	...	Clear; a few Ci-cu.
	10 25	20.8	757.70	29.729	68.5	65.2	.586	...	75.	...	...	...	...	Clear; some Ci cu.
	12 25	21.5	757.50	29.716	71.7	63.2	.490	...	73.7	...	...	...	...	Cu. in N.
	14 25	23.8	758.20	29.732	75.9	63.8	.464	...	68.7	...	...	...	...	Floating Cu.
	16 25	25.4	758.90	29.752	77.3	64.9	.480	...	67.8	...	...	...	...	Clear; S. Ci-s.
	18 25	25.5	758.55	29.738	72.9	65.3	.535	...	69.3	...	...	...	...	Clear.
	20 25	25.	758.80	29.751	68.	61.1	.521	...	86.1	...	...	...	...	Clear.
6	22 25	23.8	759.90	29.799	60.9	59.5	.498	...	86.8	...	...	...	...	Clear.
	0 25	22.9	759.95	29.807	60.	59.5	.508	...	86.5	...	...	...	...	Cu. over head, with a few drops of rain.
	2 25	22.3	759.50	29.791	59.	58.9	.505	...	88.5	...	...	...	...	Ci-cu. in Hor.
	4 25	21.7	759.50	29.794	57.3	57.	.471	...	89.	...	...	...	...	Cu., with some Ci.
	6 25	20.9	760.40	29.833	66.3	64.6	.588	...	82.3?	...	...	...	...	Cloud'g over with Cu., & Ci-cu. Ci in W.
	8 25	22.	759.65	29.797	73.7	69.	.650	...	78.3	...	...	...	...	Ci-cu; Cu s. Ci-s.
	10 25	23.6	759.95	29.803	74.7	68.2	.615	...	75.5	...	...	...	...	Cloudy, with Ci-s. and Ci-cu.
	12 25	27.1	759.70	29.775	79.7	69.5	.602	...	72.7	...	...	...	...	Ci-s; S. with N. in W.
	14 25	28.3	759.05	29.744	82.	72.	.666	...	72.2	...	...	...	...	N. in W. and NW; S. Ci. Ci-s.
	16 25	28.1	757.90	29.702	81.5	71.5	.663	...	73.1?	...	...	...	...	N; Cu; lightning.
	18 25	27.3	757.40	29.685	77.4	71.1	.682	...	78.1?	...	...	...	...	N; heavy rain.
	20 25	26.9	757.25	29.682	74.5	69.7	.685	...	82.1?	...	...	...	...
	22 25	25.8	759.45	29.773	66.6	66.6	.650	...	86.9?	

JUNE.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.]

[97]

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Day.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fahr.	Hygr., Saussure's.	Wind.		Rain, inches	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
8	h. m.													
	0 25	15.4	765.50	30.059	49.2	49.2	.362	...	78.?	.....	...	...	...	Clear.
	2 25	15.1	765.60	30.066	47.	44.7	.264	...	78.?	.....	...	...	...	Clear.
	4 25	14.2	766.45	30.105	46.6	43.6	.264	...	80.	.....	...	...	...	Clear.
	6 25	13.9	767.00	30.127	48.6	45.2	.278	...	79.3	.....	...	...	...	Clear.
	8 25	15.	767.80	30.153	55.	49.5	.303	...	77.	.....	...	...	...	Clear, with some Ci. in E.
	10 25	15.7	767.90	30.154	59.1	51.	.293	...	72.	.....	...	...	...	Clear, with a few Cu.
	12 25	17.2	767.35	30.124	62.	52.5	.298	...	69.2	.....	...	...	...	Clear, with a few Cu.
	14 25	19.2	767.45	30.118	66.1	55.2	.322	...	65.	.....	...	...	...	Clear, with Ci cu.
	16 25	20.3	767.65	30.122	68.8	55.9	.314	...	62.5	.....	...	...	...	Clear, with Cu. Ci-cu.
	18 25	20.8	767.55	30.116	64.8	55.8	.352	...	64.2	.....	...	...	...	Clear, Cu. and Ci-s. in NE. and E.
	20 25	19.2	767.90	30.136	57.5	54.1	.390	...	64.5	.....	...	...	...	Clear.
	22 25	19.7	767.80	30.182	56.	53.1	.383	...	84.9	.....	...	...	...	Clear; S. in E.
	0 25	19.5	768.20	30.148	51.	49.9	.360	...	85.	.....	...	...	...	Clear; Cu-s. in S.
9	2 25	18.5	768.00	30.145	50.8	48.9	.369	...	84.3	.....	...	...	...	Clear, with small N. S.
	4 25	17.6	768.55	30.170	49.4	47.7	.326	...	84.7	.....	...	...	...	Clear; Cu. and Ci. in SE.
	6 25	16.6	769.15	30.198	54.5	51.2	.351	...	80.8	.....	...	...	...	Clear; S. and Cu. in SSE.
	8 25	17.7	769.90	30.223	63.	57.	.404	...	75.5	.....	...	...	...	Clear.
	10 25	18.5	770.05	30.225	66.	58.2	.405	...	70.2	.....	...	...	...	Clear, with very few light Cu. Ci-s. in SE.
	12 25	21.	769.90	30.207	70.	58.1	.354	...	63.5	.....	...	...	...	Clear, with very few light Cu Ci-s. in SE.
	14 25	22.5	769.50	30.184	71.7	60.6	.407	...	63.5	.....	...	...	...	Clear, with S. and Ci-s.
	16 25	23.8	769.45	30.175	72.7	59.1	.362	...	60.8	.....	...	...	...	Light and fleecy; S. and Ci-s.
	18 25	23.6	769.85	30.193	70.9	60.8	.419	...	62.5	.....	...	...	...	Light and fleecy; S. and Ci-s.
	20 25	21.2	769.80	30.203	61.5	57.6	.438	...	80.8	.....	...	...	...	Light and fleecy; generally clear.
	22 25	20.8	769.83	30.205	56.8	55.5	.437	...	83.8	.....	...	...	...	Hazy, with S. and Ci-s.; ring around moon.

Day.	Hour.	Barometer.			Therm'rs, Fahr.		Force of vapor, in.	Dew point, Fahr.	Hygr., Saunders.	Wind.		Sky covered, &c.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.		
10	0 25	21.2	769.60	30.195	54.6	53.5	.409	...	84.	...	...	...	Thin Cu. around moon; others like Very dark clouds. [streamers in the N.
	2 25	20.4	769.35	30.187	53.5	52.8	.402	...	84.3	...	...	...	S. Cu. Ci.; Ci-s. around Hor.
	4 25	20.2	769.25	30.186	54.7	53.3	.402	...	86.	...	...	...	Great variety of clouds.
	6 25	19.	*769.65	30.207	57.4	55.1	.418	...	86.	...	...	...	Many Ci. clouds.
	8 25	20.3	770.00	30.213	63.2	61.7	.469	...	74.	...	...	...	Clear, with Ci. and S.
	10 25	22.1	769.80	30.197	72.3	62.7	.460	...	66.5	...	...	...	Overcast, with Ci. s.
	12 25	24.1	769.40	30.172	75.5	61.	.465	...	66.	...	...	...	Nearly overcast with Ci-s.
	14 25	25.5	768.85	30.144	77.7	66.5	.529	...	62.2	...	...	...	Overcast with Ci s. and Cu.
	16 25	26.1	768.80	30.140	79.2	66.1	.490	...	77.8	...	...	...	Cloudy, S.; Ci s and N.
	18 25	25.	767.30	30.085	72.5	67.1	.597	...	84.2	...	...	...	Overcast, N. and S.
11	20 25	25.	767.75	30.103	65.6	63.1	.550	...	85.9	...	...	...	Overcast, N. and Ci-s.
	22 25	24.2	767.65	30.103	65.1	62.5	.537	...	88.5	...	...	...	Cu. Ci.
	0 25	23.5	767.15	30.087	60.	59.6	.510	...	88.	...	...	...	Overcast; apparently N.
	2 25	22.7	766.20	30.053	59.4	58.5	.488	...	86.9	...	...	...	Cu. Ci-s.; Cu.
	4 25	22.1	766.95	30.045	59.4	57.5	.450	...	86.	...	...	...	Clear, with fleecy Ci. Cu.
	6 25	21.7	766.15	30.056	62.1	60.2	.507	...	74.5	...	...	...	Thin clouds around Hor.
	8 25	22.5	766.35	30.060	72.5	64.7	.524	...	64.7	...	...	...	Clear, with Ci-s. in N.
	10 25	25.6	766.15	30.037	77.5	66.	.473	...	56.2	...	...	...	Clear, with Ci and Ci-s.
	12 25	27.5	765.35	29.996	80.2	64.	.411	...	59.5	...	...	...	Clear, with a few Ci.
	14 25	28.2	764.40	29.955	82.1	...	...	...	60.3	...	...	...	Ci., with fleecy Ci-s., S. [in E. Hor.
12	16 25	29.	763.50	29.916	83.4	...	...	...	69.	...	...	...	Ci.; fleecy clouds scattered; inclined to S.
	18 25	29.	763.15	29.902	77.2	68.7	.604	...	79.3	...	...	...	Clear; halo around moon; S. in N.
	20 25	27.9	762.75	29.923	69.4	65.	.566	...	81.	...	...	...	Clear; fleecy in Hor.; inclined to S.
	22 25	26.6	762.60	29.992	68.9	62.6	.496	...	...	...	...	...

* Recorded 765.65.

DAILY METEOROLOGICAL OBSERVATIONS.

June.]

Date.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fahr.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temp., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
12	a. m.													
	0	25.9	761.90	29.869	62.6	60.5	.508		82.6	.....	.....	.....	.....	Clear; cloudless.
	2	25	761.00	29.839	66.	60.8	.477		80.	.....	.....	.....	.....	Clear; cloudless.
	4	25	760.75	29.839	65.5	60.7	.481		80.6	.....	.....	.....	.....	Clear, with S. Cu. Ci. and fleeces.
	6	25	761.00	29.843	70.2	63.6	.512		77.1	.....	.....	.....	.....	Clear; few fleecy scattered.
	8	25	761.35	29.850	76.7	67.6	.568		73.5	NNW.	.....	.....	.....	Clear; few Ci. clouds.
	10	25	761.05	29.834	79.8	69.5	.602		72.2	NNW.	.....	.....	.....	Clear; Ci. and Ci-s. in Hor.
	12	25	760.85	29.818	80.5	68.2	.550		66.7	N.	.....	.....	.....	Clear; very few Ci. around Hor.
	14	25	760.25	29.788	85.1	66.	.486		61.2	NW.	.....	.....	.....	Clear; very few Ci. around Hor.
	16	25	759.50	29.751	86.5	71.	.574		62.2	W.	.....	.....	.....	Generally clear; clouds fleecy, with Ci-a.
	18	25	759.35	29.748	80.9	72.	.685		72.1	WSW.	.....	.....	.....	Generally clear; light clouds over head; S. and Ci-s. in Hor. N. in NNE.
	20	25	757.85	29.698	75.6	71.5	.716		79.3	SW. by W.	.....	.....	.....	An arch of Ci-a. from N. to S.; N. in Hor. NNE; Ci-a. in E. Hor.
13														
	22	25	758.80	29.635	73.4	70.5	.706		81.8	SW.	.....	.....	.....	Clear; a few Ci-a.
	0	25	758.10	29.710	71.9	69.8	.694		85.7	SW.	.....	.....	.....	Clear; very light S. and Cu
	2	25	757.35	29.685	70.3	69.3	.697		85.9	SW.	.....	.....	.....	Clear; very light S. and Cu.
	4	25	756.90	29.670	72.	69.6	.688		86.	SW. by W.	.....	.....	.....	Clear; very light S. and Cu.
	6	25	757.00	29.674	73.5	69.7	.678		82.5	SW. by W.	.....	.....	.....	Clear; very light S. and Cu.
	8	25	757.00	29.669	80.7	72.5	.696	9 A. M.	74.5	.....	.....	.....	.....	Clear; thin clouds around Hor.
	10	25	757.20	29.669	83.7	71.8	.639	(D. 63.5)	69.	.....	.....	.....	.....	Clear; numerous light Cu. and Ci-cu.
	12	25	757.40	29.681	81.8	71.8	.661		69.5	W.	1	.....	.....	Cloudy; S. Ci-a.; Ci-cu.
	14	25	757.05	29.661	84.4	71.2	.608	3 P. M.	67.	WNW.	1	.....	.....	Clear; beautiful Cu. and Cu-a. in S.
	16	25	757.45	29.674	84.5	70.3	.604	(D. 58.5)	64.8	WNW.	1	.....	.....	Clear; Ci. a. and Cu.
	18	25	756.40	29.715	80.2	69.8	.604		68.4	WNW.	.....	.....	.....	Clear; Cu.; fleecy; S. in SSW.
	20	25	756.50	29.773	71.3	69.	.678	9 P. M.	75.	NNE.	.....	.....	.....	Clear; Cu-a. in SSE.
	22	25	761.60	29.850	66.7	59.5	.433	(D. 57.7)	74.2	NNE.	.....	.....	.....	Clear; Ci. Ci-cu.

DAILY METEOROLOGICAL OBSERVATIONS.

[June.]

Day.	Hour.	Barometer.			Therm'ts, F.ah.		Force of vapor, in.	Dew point, F.ah.	Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
15	h. m.													
	0 25	23.4	761.00	29.845	64.3	61.9	.530	.....	85.5	SSW.	...	...	...	N., moon nearly obscured.
	2 25	22.8	760.25	29.819	64.2	60.6	.493	.....	84.7	SW.	...	...	...	N., Ci.; raining.
	4 25	21.9	760.20	29.821	63.	60.6	.508	.....	87.3	W.	...	...	...	N., Ci-cu.; raining.
	6 25	22.	760.45	29.830	62.3	60.7	.517	9 A. M.: (D. 53.5)	89.?	W.	...	...	...	N.; raining.
	8 25	21.8	761.20	29.861	60.5	59.7	.507	.....	87.	NE.	...	.06	...	Rain over; nearly clear in N.
	10 25	22.	761.45	29.869	60.8	58.2	.487	.....	87.	NE.	...	.18	...	Sky lighter; 2. Cu. clouds.
	12 25	23.3	761.40	29.862	65.9	61.	.486	4 P. M.: (D. 55.2)	79.	E.	...	...	...	Clear, with Cu. and Cu s.
	14 25	24.	760.85	29.837	69.5	62.7	.496	.....	74.	E.	...	...	...	Cloudy, N. and Cu.; cl. in N. (and SE.
	16 25	23.9	760.75	29.833	69.4	62.7	.494	.....	75.	SW.	...	...	...	Clear; fleecy clds. over head; N. in Hor E.
16	18 25	23.	760.75	29.838	66.	61.5	.499	9 P. M.: (D. 56.4)	80.8	WSW.	...	...	...	Clear; S. and Ci-s in N. and SE.
	20 25	21.9	760.95	29.851	68.5	57.6	.368	.....	89.3	WSW.	...	...	...	Clear; light fleecy clds.; heavy dew.
	22 25	21.6	762.45	29.910	56.8	56.8	.468	.....	90.?	WSW.	...	...	...	Clear, with a great variety of clouds.
	0 25	20.9	762.35	29.910	55.9	51.6	.345	3 A. M.: (D. 51.)	79.5	N.	...	...	...	Clear; fleecy and Ci.
	2 25	20.3	762.90	29.935	52.4	48.2	.303	.....	77.5	N.	...	...	...	Clear; variety of clouds.
	4 25	19.2	763.50	29.963	50.6	47.	.286	.....	79.6	N.	...	...	...	Clear; Ci-s. Cu. Fl.
	6 25	18.	764.20	29.997	54.9	50.7	.394	9 A. M.: (D. 47.)	76.	N.	...	...	...	Clear; few light Ci.
	8 25	19.2	764.75	30.013	62.	53.1	.313	.....	69.5	NNE.	...	...	...	Clear; nearly cloudless.
	10 25	20.	766.05	30.020	66.1	55.5	.332	3 P. M.: (D. 44.2)	64.5	NE.	...	...	...	Clear; few small Cu.
	12 25	21.	764.85	30.008	68.5	56.9	.399	.....	69.	NW.	...	...	...	Clear; few small Cu.
17	14 25	22.8	764.55	29.968	71.5	56.9	.307	.....	59.	WNW.	...	...	...	Clear; few small Cu. and Ci.
	16 25	24.3	764.75	29.988	75.	58.7	.321	.....	56.5	W.	...	...	...	Clear; few small Cu. in E.
	18 25	25.5	765.15	29.997	68.9	60.	.412	9 P. M.: (D. 48.9)	65.5	WSW.	...	...	...	Perfectly clear.
	20 25	22.5	765.20	30.014	62.3	57.	.413	.....	70.5	WSW.	...	...	...	Perfectly clear.
22	25	22.6	766.15	30.052	57.5	55.	.414	.....	85.	WSW.	...	...	...	Perfectly clear.

[1840.

DAILY METEOROLOGICAL OBSERVATIONS.

June.]

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, eths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
17	A. M.													
	0 25	21.5	766.15	30.057	54.3	53.	.400	3 A. M.: (D. 54.)	87.	WSW.	...	...	...	Clear.
	2 25	20.8	765.75	30.046	53.1	52.5	.400		87.	SSW.	...	...	...	Clear; slight cloud in N.
	4 25	19.9	766.55	30.080	50.	49.6	.363		90.3	SW. by S.	...	...	...	Clear; few S. and Cu. in N.
	6 25	19.8	766.95	30.097	58.	55.7	.438	9 A. M.: (D. 52.5)	83.7	SW. by S.	...	...	...	Clear; Cu-ci.
	8 25	20.7	767.25	30.104	68.	59.5	.419		72.	WNW.	...	...	...	Clear.
	10 25	21.6	767.55	30.111	72.5	60.8	.405		86.5	W.	...	...	...	Clear; Cu-s. Ci-s.
	12 25	23.5	767.15	30.086	73.5	61.8	.437	3 P. M.: (D. 52.)	64.7	WSW.	...	...	...	Clear; light Cu. in Hor. [of the S.
	14 25	25.3	766.95	30.071	76.5	62.5	.410		62.	SW.	...	...	...	Clear; many light Cu. Ci-s over much
	16 25	26.2	766.70	30.056	77.	63.2	.425	(A. 76.5)	60.4	SW.	...	...	...	Cloudy; Cu. in S. and W. Hor., and in N.
18	0 25													and NW. Ci-s. and Ci. in SW.
	2 25	25.4	766.80	30.056	74.7	63.5	.459	9 P. M.: (D. 53.4)	65.2	SSW.	...	...	...	Clear; Cu-s. SW. Hor., Ci s. in E.
	4 25	23.7	766.85	30.074	68.	57.7	.435		78.	SSW.	...	...	...	Clear; a few light Ci-cu in W.
	6 25	23.2	766.75	30.071	60.5	57.3	.440		83.5	SSW.	...	...	...	Clear; Cu. Ci-cu.
	8 25	21.3	766.25	30.023	54.4	53.9	.431	3 A. M.: (D. 53.5)	86.6	S. by W.	...	...	...	Clear ? Ci.; Cu.; Cu-s.
	10 25	21.3	765.25	30.023	56.9	55.5	.435		86.8	S. by W.	...	...	...	Clear ? Cu.; Ci.
	12 25	20.8	764.60	29.999	61.3	59.2	.484	9 A. M.: (D. 57.)	85.	S. by W.	...	...	...	Clear ? Ci-cu.; Fl.
	14 25	20.5	764.60	29.999	61.3	59.2	.484		84.	SSW.	1	...	...	Overcast.
	16 25	21.3	764.	29.973	67.	64.2	.570		83.7	SSW.	1	...	...	Overcast; heavy Cu-s. Train in NW. & N.
	18 25	21.3	763.10	29.937	69.1	65.9	.601	3 P. M.: (D. 58.5)	82.2	SW.	...	...	...	Very dark clds; Ci-cu.; N. in N. & W.;
	20 25	22.7	762.70	29.915	71.5	67.1	.609		82.	S.	...	...	...	Overcast; heavy Cu-s. in S.
19	0 25	20.9	761.25	29.867	65.7	62.4	.539		83.7	E.	...	...	...	Cloudy; rain at intervals.
	2 25	22.	760.95	29.850	66.6	64.5	.543		83.7	E.	...	...	...	Raining steadily.
	4 25	21.	760.30	29.829	65.7	64.	.577	9 P. M.: (D. 56.2)	86.5	NW.	...	...	...	Dark and cloudy.
	6 25	20.9	759.20	29.796	63.8	63.2	.575		86.5	NW.	...	...	...	Dark and cloudy; Cu. Cu-4.
20	0 25	21.	758.90	29.774	62.6	62.2	.559		88.2	NW.	...	...	...
	2 25	21.									...	...	...

Day.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Resaumur's.	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
		Temperature.	Obs'd height.	Corrected.	Dry.	Wet.				Dir. point.	Force, lbs.			
19	h. m.													
	0 25	20.6	758.30	29.753	62.8	61.2	526	3 A. M.: (D. 56.5)	87.	W.		.06	Dark; Nimbus; Cu.	
	2 25	20.3	757.95	29.741	63.	61.2	524		84.	N.	1		Nimbus; raining fast.	
	4 25	19.	758.05	29.750	58.2	53.1	356		76.9	NNW.	1		Clear, with Cu. Ci.	
	6 25	18.4	758.85	29.785	57.4	50.7	306	9 A. M.: (D. 46.5)	72.8	NNW.	1		Clear; a few Fl. Cu. Ci.	
	8 25	18.9	759.00	29.787	62.	53.5	324		69.5	NW.	1		Clear; a few light Cu. near E. Hor.	
	10 25	19.3	758.10	29.750	65.5	53.5	354		61.7	WNW.	2		Clear; few small Cu.	
	12 25	20.	757.45	29.696	68.3	54.5	278	3 P. M.: (D. 46.5)	58.5	WNW.	3		Clear; many light Cu.; some Ci.	
	14 25	21.5	756.85	29.690	70.2	56.2	303	(A. 73.)	58.2	WNW.	2		Clear; many large Cu.	
	16 25	22.1	756.25	29.683	69.8	56.6	316	9 P. M.: (D. 51.)	59.5	WNW.	1		Cloudy; Cu.; Cu-s.	
	18 25	19.6	756.20	29.674	63.	55.2	359		70.3	NW.	1		Cloudy.	
	20 25	18.6	756.50	29.691	62.5	53.8	325		69.	NW.	2		Cloudy; raining occasionally.	
	22 25	18.9	758.65	29.695	60.	53.4	344		72.	NW.	1		Dark and equally.	
	20	0 25	18.8	756.15	29.674	58.	53.2	361	3 A. M.: (D. 47.5)	77.2	NW.	1		Generally clear; Cu. in W.
		2 25	17.7	755.15	29.643	56.9	51.1	321		76.5	W.	1		Clear ? Cu.; Cu-s.
4 25		17.6	755.05	29.639	57.7	52.9	358		77.2	W.	1		Clear ? Cu. Ci.; Cu-s.	
6 25		17.4	754.10	29.608	56.	51.7	347	9 A. M.: (D. 46.5)	77.	WNW.	1		Clear ? Ci-cu.	
8 25		17.8	754.20	29.605	62.	54.7	358		74.5	WNW.	2		Cloudy; Cu.; Cu-s.; and in NE. Ci-s.	
10 25		19.1	754.40	29.608	66.7	56.5	350	(A. 65.)	72.	NW.	2		Overcast; heavy Cu.	
12 25		20.9	753.15	29.627	69.	58.4	378	3 P. M.: (D. 46.)	68.	NNW.	2		Overcast; Ci-cu.; Cu.	
14 25		21.2	755.80	29.652	68.9	58.6	354		67.2	N.	2		Overcast; Ci-cu.	
16 25		20.2	756.50	29.683	66.6	57.6	380	(A. 69.)	70.1	N. by E.	1		Overcast; Cu.; Cu-s.; small space clear in W. Hor.	
18 25		22.	757.40	29.710	65.2	56.8	372	(D. 48.)	70.	N. by W.	2		Clear; Cu. and Ci. in E. Hor.	
20 25		20.6	758.	29.740	60.5	54.6	369		75.5	NNE.			Clear and cloudless.	
22 25		20.1	758.50	29.768	55.	52.8	385		83.5	NNE.			Clear, Exc. few clds. in Hor., N. and W.	

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

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Date.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
23	A. m.													
	0 25	22.8	759.40	29.785	62.8	61.2	.526	3 A. M.: (D. 50.)	87.5	S.	...	...	...	Clear.
	2 35	23.2	758.50	29.782	60.2	58.5	.479	(D. 50.)	88.	S.	...	...	2	Clear.
	4 25	21.5	758.15	29.742	59.6	58.4	.483	9 A. M.: (D. 60.)	89.	SSW.	...	...	6	Ci.; Cu.
	6 25	21.8	758.65	29.760	64.2	62.7	.555	9 A. M.: (D. 60.)	87.	SW. by S.	...	...	7	Cu.; Ci. moving from WSW.
	8 35	22.6	758.86	29.765	71.3	68.4	.659		86.	SW.	...	...	8	S.; Cu.; Ci-cu.; moving from WSW.
	10 25	24.4	759.35	29.775	72.7	70.7	.722		81.5	SW.	...	...	6	Ci-a.
	12 25	26.7	759.50	29.770	80.2	71.5	.664	3 P. M.: (D. 61.5)	73.5	WSW.	...	...	6	Ci.; Cu.; from W.
	14 25	28.6	759.40	29.767	83.	71.2	.623	(D. 61.5)	69.	WNW.	...	...	6	Ci-cu.; Cu.; from W.
	16 25	29.	759.36	29.777	83.	71.5	.633	(A. 83.)	68.5	W. by N.	...	...	7	Ci-a.; Cu.
	18 25	28.5	764.70	29.966	81.6	72.8	.696	9 P. M.: (D. 63.)	71.5	W.	...	...	7	Ci-cu.
	20 25	27.	761.86	29.961	77.7	71.	.560		71.	NW.	...	...	4	Cu.; Ci-cu.
	22 25	25.5	762.75	29.903	72.6	66.1	.567		...	NNE.	...	...	2	Ci-a.
	0 25	24.5	763.00	29.918	70.3	64.5	.540	3 A. M.: (D. 57.6)	79.6	NNE.	...	...	5	N., very quiet.
	2 25	24.8	763.70	29.944	67.3	62.1	.500		81.	NNE.	...	...	3	Ci.; Cu., very quiet.
	4 25	24.1	764.55	29.981	65.9	61.1	.487		81.5	NNE.	...	...	7	Ci.; Cu.
	6 25	23.5	765.55	30.023	66.2	61.7	.504	9 A. M.	82.8	NNE.	...	...	7	Ci.; Cu. from SW.
23	8 25	22.2	766.10	30.051	70.	63.2	.506		78.5	NNE.	...	...	8	Fl.; Cu. from WNW.
	10 25	23.5	766.50	30.061	72.7	65.	.529		76.2	ENE.	...	...	6	Ci-a. in Hor.; Ci-cu. above.
	12 25	25.2	766.50	30.053	76.3	68.	.586	3 P. M.	75.	E.	...	...	6	S. near Hor. S.; Ci. and Ci-cu. above.
	14 25	27.4	766.35	30.036	80.9	*68.5	.554		67.6	E.	...	...	1	2 Str. (1 Ci. 2 Cu.) near Hor.
	16 25	27.8	766.10	30.025	83.2	70.2	.581		67.5	E.	...	...	1	Clear.
	18 25	28.	766.10	30.024	77.6	68.	.571	9 A. M.: (D. 59.)	69.5	S. by E.	...	...	1	Ci.; Cu.
	20 25	25.5	766.45	30.049	70.	64.5	.543		79.	Some Ci. and S. near Hor. SW.	...	...	...	Some Ci. and S. near Hor. SW.
	22 25	25.7	766.90	30.066	63.4	62.	.543		87.	SW. by S.	...	...	...	Clear.

* Recorded 78.5.

Day.	Date.		Barometer.			Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, Sols.	Clouds, &c.
	Hour.	m.	Temp., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, in.			
24	0	25	24.3	766.50	30.057	60.5	60.2	.552	3 A. M.: (D. 61.)	90.	SW. by S.	...	...	1	Dark.
	2	25	23.9	766.05	30.045	59.3	59.2	.507		89.8	SSW.	...	...		Thick fog; Ci. in S. and E. Hor.
	4	25	23.2	766.15	30.053	58.	57.8	.484		88.	SSW.	...	...		Sky clear; fog.
	6	25	21.3	766.75	30.082	63.3	62.8	.567	9 A. M.: (D. 64.)	88.	SSW.	...	...		Sky clear; fog.
	8	25	22.7	766.70	30.073	70.7	67.9	.648		85.	SSW.	...	...		Clear, Exc. few Cu.-s. in NW. Hor.
	10	25	25.4	766.50	30.062	77.4	69.2	.616	(A. 76.5)	75.	SSW.	...	...		Clear, Exc. few very small Cu.
	12	25	27.8	765.55	30.003	81.	69.2	.573	3 P. M.: (D. 61.)	67.2	SSW.	...	...		Clear, with Cu.
	14	25	29.1	764.75	29.965	84.3	70.	.564	(D. 61.)	65.	SW.	...	...		Cu. in masses around Hor.
	16	25	29.9	764.20	30.089	84.5	71.4	.610	(A. 82.)	65.5	SW. by S.	...	...	1	Ci. Cu. from W.
	18	25	29.6	763.25	29.904	79.	69.7	.620	9 P. M. (D. 60.7)	70.5	SW.	...	...	1	Ci. Ci.-s. from W.
	20	25	26.9	763.10	29.910	71.6	66.4	.588	(A. 69.2)	85.	SW. by S.	...	...	4	S. and Ci.-s. Ci.
	22	25	25.1	762.85	29.910	68.	65.3	.592	(A. 69.2)	90.	SW. by S.	...	...		S. from SW.
25	0	25	23.9	761.65	29.868	65.2	64.5	.599	3 A. M.: (D. 61.6)	89.5	SW.	...	...	1	Cu.
	2	25	23.3	761.05	29.847	65.6	65.2	.615		86.4	SW. by W.	...	...	2	Cu. from S.
	4	25	23.8	761.00	29.845	67.3	66.5	.639		85.7	SW. by W.	...	...	2	Ci. Cu. from S.
	6	25	23.7	761.10	29.847	69.4	67.6	.652	9 A. M.: (D. 62.)	85.7	SW. by W.	...	...	5	Ci. from S.
	8	25	25.5	761.05	29.836	76.6	70.5	.672	(D. 62.)	78.5	NW.	...	...	2	Ci.-s. Cu.
	10	25	27.	761.05	29.829	80.1	71.	.651	(A. 79.2)	72.7	ENE.	...	...	1	Ci.-cu. in SW.
	12	25	29.3	760.65	29.804	83.5	73.7	.713	3 P. M.: (D. 61.7)	71.7	ENE.	...	...	2	Ci.-s. Cu.
	14	25	31.	760.30	29.777	87.	72.	.611		62.1	E.	...	...	1	Cu.
	16	25	30.5	759.70	29.759	86.5	74.6	.723		69.8	ESE.	3	...	2	Cu.
	18	25	29.	759.50	29.759	81.	73.1	.714	9 P. M.: (D. 60.5)	76.	ESE.	1	...	6	2 S., 1 Ci. Ci.-cu. from NW; 2 Ci.-cu.
	20	25	27.1	760.45	29.805	71.7	68.	.639		83.5	ENE.	...	...	4	Ci. Ci.-s. Cu.-s.
	22	25	26.9	761.10	29.832	68.9	67.3	.647		88.	ENE.	...	...	8	Overcast, and very dark.

• Recorded 57.8.

† Recorded 58.

Date.	Hour.	Barometer.			Therm'n, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temp'ture, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
26	A. M.													
	0 25	26.2	760.45	29.811	66.4	65.2	.609	3 A. M.: (D. 61.7)	88.8	ENE.			8	N.; very dark.
	2 25	25.6	759.95	29.793	66.	64.5	.590		84.5	ENE.			8	N.; very dark.
	4 25	24.7	760.20	29.808	66.3	64.6	.601		89.4	ENE.			8	N.; raining.
	6 25	23.9	760.80	29.835	65.8	64.4	.599	9 A. M.: (D. 61.)	85.4	ENE.			7	Small N.
	8 25	22.9	761.15	29.853	69.4	65.1	.570		83.	E. by N.		.05	8	Rain steadily.
	10 25	22.	761.65	29.877	68.5	66.2	.586		85.	E.			8	Rain hard.
	12 25	21.6	762.25	29.902	67.2	64.	.561	3 P. M.: (D. 55.)	85.5	E.		.19	8	Rain moderately.
	14 25	22.9	762.40	29.902	70.1	64.6	.546	(A. 71.)	79.5	E.			8	2 Str., (1 Cu. Cu-s., stationary; 2 fleecy [from E.]
	16 25	23.8	762.40	29.903	69.9	63.	.499	9 P. M.: (D. 51.)	76.6	E.			8	Fl. Cu.
	18 25	23.2	762.30	29.901	66.3	61.3	.466		75.	ENE.			8	Fl. Cu-s. from SE.
	20 25	21.5	762.35	29.907	68.9	58.5	.435		77.5	ENE.			8	Fl. Cu-s. Cu.
27	22 25	20.5	762.50	29.917	62.3	57.4	.424		78.	ENE.			2	Cu. Cu s. near Hof.
	0 25	19.5	762.00	29.908	61.5	56.3	.403	3 A. M.: (D. 49.7)	79.7	NE by E.			8	Overcast; appears N.
	2 25	19.8	761.40	29.878	59.6	55.1	.392		82.	ENE.			8	Overcast; Cu. N.
	4 25	19.7	761.60	29.887	60.	57.1	.441		83.	ENE.			8	Overcast; Cu. N.
	6 25	19.2	761.60	29.889	61.3	59.7	.499	9 A. M.: (D. 58.5)	84.3	ENE.			3	Cu. from N.
	8 25	19.7	761.90	29.899	65.5	62.4	.530		84.5	ENE.			8	Overcast; dark N.
	10 25	21.3	761.75	29.885	69.2	66.	.569	3 P. M.: (D. 62.)	83.	E. by N.			8	Cu. Fl. from E.
	12 25	23.6	761.05	29.846	73.4	68.4	.632		80.5	E. by N.			5	2 Str.; (1 Cu. Cu-cu. from SSE.; 2 Ci.
	14 25	25.3	760.35	29.810	76.1	69.5	.640	(A. 75.2)	78.	E. by N.			7	2 Str.; (1 Ci. Cu-cu. apparently stationary; 2 Cu. from E.)
	16 25	25.5	760.55	29.817	75.7	69.8	.638		79.2	E. by N.			7	Dark, Cu. N. from NE.)
	18 25	25.8	760.35	29.808	71.5	68.	.641	9 P. M.: (D. 62.5)	89.5	E.			7	2 Str. (1 Ci-cu. from W.; 2 Cu. Fl. from
	20 25	...	760.50	...	69.2	67.1	.637		87.5	ENE.			4	2 Str. (middle, Ci-cu. S.; lower, Cu. from
	22 25	24.2	760.65	29.838	68.2	67.	.646		87.5	ENE.			8	Overcast and dark. [NE.]

[1940.]

DAILY METEOROLOGICAL OBSERVATIONS

June.]

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hyg., Sausure's.	Wind.		Rain, inches.	Sky covered, eths.	Clouds, &c.
		Temp's, centigrade.	Obs'd height, millimetres.	Cor. height, inches.	Dry.	Wet.				Dir. point.	Force, lbs.			
29	0 25	28.	761.20	29.840	72.3	71.1	.741	3 A. M.: (D. 67.5)	88.5	SSW.	..	..	4	Clear.
	2 25	28.6	761.00	29.834	71.2	70.5	.730	..	89.7	SW.	..	..	4	Dark Cu.
	4 25	28.1	760.85	29.832	70.7	70.	.719	..	90.8	SSW.	..	..	8	Overcast.
	6 25	25.	761.40	29.863	71.5	71.	.745	9 A. M.: (D. 70.)	91.3	SSW.	..	..	..	Clear.
	8 25	..	..	..	..	..	..	..	..	SSW.	..	..	..	..
	10 25	27.6	761.00	29.835	81.6	76.5	.837	(A. 79.)	84.	SSW.	1	..	6	Cu.; Ci-cu. from SW.
	12 25	29.	761.25	29.838	83.4	77.2	.849	3 P. M.: (D. 67.)	81.5	SSW.	1	..	5	Cu.; Ci-cu. from WSW.
	14 25	31.	760.50	29.789	86.8	76.2	.767	..	73.5	SSW.	2	..	1	Cu. around Hor.
30	16 25	31.3	759.45	29.746	86.3	76.4	.757	(A. 83.)	71.5	S. by W.	1	..	1	Cu.; Ci; Ci-cu. in the E.
	18 25	30.1	758.60	29.719	83.4	74.8	.762	9 P. M.: (D. 67.5)	77.8	S.	1	..	1	Cu.; Ci; Ci-cu.
	20 25	27.2	759.50	29.767	76.7	72.8	.750	..	82.	S. by W.	..	..	..	Cu. in the W.; generally clear.
	22 25	28.5	760.20	29.789	73.5	71.5	.740	..	88.5	S. by W.	..	..	..	Cu. in the W.; generally clear.
	0 25	27.7	759.75	29.775	69.9	68.3	.666	3 A. M.: (D. 65.)	88.3	W.	..	..	6	Cu.; N.; raining.
	2 25	26.7	758.65	29.737	66.6	67.3	.652	..	91.5	W. by S.	..	..	4	Cu.; N. from E.
	4 25	26.	758.76	29.744	67.7	66.5	.635	..	90.7	NW. by W.	..	..	4	Ci.; Cu.; Fl.; Cu.-s. from SE.
	6 25	26.1	759.50	29.773	71.1	68.6	.666	9 A. M.: (D. 66.)	88.	N. by W.	..	..	..	Fl.; Ci.; Cu. from NE.
	8 25	26.	759.78	29.788	75.	68.9	.683	..	81.	NNW.	..	..	2	Light Ci. and Cu. from NW.
	10 25	26.4	760.00	29.792	78.	71.7	.698	..	79.	NNW.	..	..	1	Ci.; Ci-cu.; Cu. from NW.
	12 25	28.1	759.50	29.763	82.	73.6	.683	3 P. M.: (D. 66.)	74.	NW. by N.	..	..	1	Ci.; Ci-s. in E. detached Cu.; heavy Cu. in [W. Hor.
	14 25	29.5	759.50	29.767	83.2	72.1	.653	(D. 66.)	70.5	NNW.	..	..	1	Large Cu.; light Ci. from SW.
	16 25	30.7	758.76	29.732	84.4	71.8	.631	(A. 83.)	68.3	W.	..	..	3	Ci.; Ci-cu.; Cu. from W.
	18 25	28.1	759.15	29.749	76.2	71.2	.698	9 P. M.: (D. 66.)	83.5	NNW.	..	..	6	Cu.; Ci cu.; Ci.; Cu.-s; partial rainbow in [SE.
	20 25	27.6	759.50	29.766	71.9	69.6	.691	..	87.5	NNW.	..	..	..	Clear; detached Cu. in NW.
	22 25	27.6	760.30	29.784	70.	68.6	.679	..	89.	NNW.	..	..	..	Clear.

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

Day.	Hour.	Barometers.			Therm'rs, Fah.		Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, eiths.	Clouds, &c
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.			Dir. points.	Force, lbs.			
1	0	25.9	760.80	29.826	71.1	65.3	.559	85.6	NNW.	...	...	6	Numerous Cu.
	2	25.2	761.05	29.838	68.7	62.5	.499	79.	NNW.	...	...	6	Numerous Cu., in SE. and W. Hor.
	4	23.8	761.50	29.863	64.8	64.1	.591	81.8	NNW.	...	...	6	Cu. Ci. Cu-s.
	6	22.7	762.25	29.898	63.7	63.6	.698	74.7	NNW.	...	...	6	Few Cu. near Hor., S. and W.
	8	20.6	762.10	29.900	65.8	57.3	.883	72.3	NW by N.	...	...	1	Ci. Cu.; Ci-cu., from NW.
	10	22.1	762.80	29.914	69.2	59.3	.401	69.5	NNW.	...	...	1	Cu. Cu-s. Ci-cu., from WNW.
	12	23.	762.65	29.910	70.2	59.5	.395	68.	NW.	...	...	4	Cu. Ci-cu., from NW.
	14	24.7	762.40	29.894	71.6	59.7	.385	66.5	NW.	...	...	4	Cu. Cu-s., and light Ci. NNW.
	16	24.2	762.70	29.908	72.8	60.6	.397	66.1	NW.	...	...	6	Cu. Ci.; NNW.
	18	25.4	763.25	29.923	65.8	61.4	.500	71.8	NNW.	...	...	6	Ci. Cu-s.; detached Cu. from W.
	20	23.9	763.80	29.953	68.2	58.	.431	78.	NW.	...	...	...	Cu. Cu s.; very few.
	22	23.1	764.85	29.999	61.1	56.5	.415	79.5	NW by N.	...	...	2	A few scattered Cu.
	0	20.9	764.70	30.003	59.7	55.1	.393	81.9	NW by N.	...	...	1	Cu. Cu-s. S.
	2	21.2	764.75	30.004	58.	54.1	.385	84.5	NW.	...	...	8	S. Cu.
	4	20.	765.05	30.020	58.3	54.4	.390	84.	NW.	...	...	8	Cu. Ci-cu. Cu-s.
	6	19.7	765.60	30.044	59.9	55.5	.402	83.1	NW.	...	...	8	Cu. Ci. Ci-cu.
2	8	20.5	766.25	30.065	64.	57.	.395	77.	NW.	...	...	7	Ci. Ci s. Ci-cu. Cu s. from WSW.
	10	20.6	766.15	30.061	66.2	57.6	.386	74.	NW by W.	...	...	8	Ci.; Ci s. in NE. & E.; Ci-s. in W. & NW.
	12	22.2	766.25	30.057	68.	59.5	.430	72.	W.	...	...	8	N.; a little rain.
	14	23.	766.20	30.052	69.7	61.5	.458	72.5	WSW.	...	...	8	S.; Cu. in N. and W.
	16	22.3	766.10	30.051	67.8	61.5	.479	79.	WSW.	...	...	8	S.; Cu. in N. and W.; Cu-s.
	18	21.8	766.35	30.063	66.5	61.	.479	81.9	WSW.	...	...	8	Ci. Cu. Ci-cu.
	20	21.2	766.40	30.069	63.	60.	.489	82.	WSW.	...	...	8	S.; Cu. Ci-cu.
	22	21.	766.40	30.070	61.5	59.	.478	82.	WSW.	...	...	8	Very dark.

Day.	Date.	Thermom. Fahr.		Barometer.		Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
		Hour.	Temperature.	Old height.	Corr. height.	Dry.	Wet.			
3		0	25	765.60	30.039	60.8	58.8	.481	88.6	Dark thick cloud.
		2	25	765.50	30.036	61.	59.5	.498	90.3	Dark thick cloud.
		4	25	765.50	30.038	60.2	59.	.493	91.	Ci. cu., S., &c.
		6	25	766.30	30.071	61.2	59.7	.601	90.7	Ci., Cu-s., Cu.
		8	25	766.30	30.063	66.1	60.7	.476	90.7	Cu., Cu-s., Ci. cu., Ci-s., from W.
		10	25	766.65	30.083	64.3	62.2	.641	87.	Dark heavy clouds from NE.
		12	25	766.75	30.087	64.6	60.9	.498	85.	Dark N., raining occasionally.
		14	25	766.65	30.079	66.7	60.5	.463	80.5	N., Cu., Cu-s., from NE.
		16	25	766.65	30.083	64.5	61.	.502	81.8	S., Ci. cu., Cu., from NE.
		18	25	766.70	30.090	62.5	59.8	.490	83.2	S., Cu-s., N., from NE.
		20	25	766.80	30.093	60.2	58.5	.479	83.5	S., Cu-s., Cu.
4		0	25	766.55	30.084	59.	57.4	.462	88.2	Dark Cu., Ci. cu.
		2	25	766.55	30.086	58.2	57.	.460	90.5	Cu. Ci. cu.
		4	25	766.95	30.107	57.1	56.1	.448	93.	Dark Cu.
		6	25	767.60	30.135	59.3	56.6	.498	91.8	Large Ci-s. along Hor. S. and E.
		8	25	768.00	30.139	66.5	59.7	.443	87.6	Clear, Exc. a long Ci. Cu. S.
		10	25	768.20	30.139	69.7	60.4	.425	77.	Clear, Exc. light Ci-s. in SE. and SW.
		12	25	768.10	30.134	74.1	59.7	.369	70.	Cu. Ci. cu.
		14	25	767.65	30.103	74.6	62.	.418	61.?	Cu. Ci. cu. NNE.
		16	25	768.15	30.114	80.5	62.7	.372	63.	Cu. around Hor.
		18	25	768.55	30.133	74.	60.3	.373	57.1	Generally clear, Ci. in W.
		20	25	768.75	30.160	65.	60.7	.468	60.8	Ci. Cu. Ci-s.
		22	25	768.65	30.166	61.	57.8	.450	83.	Ci. Ci-s. in N. and W.
									85.5	Light S. in N.

4th, at 20 hours, auroral light in NNW., about 10° above horizon.
4th, at 22 hours, very faint aurora still visible in NW.

[1940.

DAILY METEOROLOGICAL OBSERVATIONS.

July.]

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gaumert.	Wind.		Rain, inches.	Sky covered, eigh.	Clouds, &c.
		Temp., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. point.	Force, lbs.			
8	0	21.7	766.80	30.082	65.	63.6	.573	3 A. M.: (D. 58.3)	89.2	.....	.....	.....	8	N., or Cu.
	2	21.6	766.15	30.056	64.3	62.9	.560		90.5	.....	.....	.....	8	Cu.
	4	21.3	766.35	30.062	63.1	62.3	.546		91.8	.....	.....	.....	..	Very thick fog, and sky not to be seen
	6	20.7	766.80	30.087	63.5	63.1	.546	9 A. M.: (D. 63.)	90.7	SE.	.....	.....	..	Mist remains.
	8	20.9	766.35	30.064	67.	64.3	.573	(A. 66.5)	88.	E. by N.	.....	.....	8	N.
	10	21.6	766.10	30.054	69.4	66.	.600	3 P. M.: (D. 67.)	85.5	E. by S.	.....	.....	8	N., raining at times.
	12	23.6	765.10	30.005	73.6	71.2	.730	(A. 66.5)	87.	SE.	.....	.02	8	N., fine rain.
	14	23.6	764.00	29.962	73.	70.2	.701	(D. 67.)	88.	SSE.	.....	.....	8	N., shower.
	16	23.9	763.20	29.889	73.9	71.3	.729	9 P. M.: (D. 67.)	88.5	SSE.	1	.03	8	N., Cu. from SW.
	18	23.6	762.25	29.893	73.	71.7	.754	(A. 66.7)	90.	SW.	.....	.09	8	N., Cu. from SE.
9	20	.....	.....	.....	73.	71.5	.747		90.5	S.	.....	.01	8	N., Cu. from SW.
	22	23.6	761.50	29.864	72.5	71.4	.749		90.5	SW. by S.	.....	.07	8	N., Cu. from SW.
	0	23.6	761.15	29.850	71.9	71.	.741	3 A. M.: (D. 68.2)	91.8	SW.	.....	.....	8	N., Cu. from SW.
	2	23.7	760.50	29.824	72.1	70.7	.739		89.6	SW.	.....	.....	8	N., Cu. from SW.
	4	23.7	760.45	29.822	71.9	70.	.706		89.3	SSW.	.....	.01	8	N., Cu. from SW.
	6	23.8	760.95	29.842	71.5	69.7	.702	9 A. M.: (D. 68.)	87.8	W. by S.	.....	.....	8	Very dark.
	8	24.5	761.00	29.840	73.7	70.6	.707	(D. 68.)	82.	WSW.	.....	.....	8	Light Cu.-cu., rain.
	10	25.1	761.00	29.837	75.	71.	.707	(A. 76.5)	85.	WSW.	.....	.....	8	Ci cu., Cu. from W.
	12	25.5	760.65	29.821	76.4	71.	.703	3 P. M.: (D. 66.)	84.5	WSW.	.....	.....	8	Cu., Cu.-a., Ci-cu. from WSW.
	14	26.1	759.75	29.783	76.6	71.1	.692	(D. 66.)	82.	WSW.	.....	.....	6	Cu., Cu.-a., Ci-cu. from WSW.
	16	26.8	759.45	29.767	79.3	72.3	.706	(A. 81.)	80.4	SW. by W.	.....	.....	7	Ci-cu., Cu., Ci-a. from WSW.
20	25	25.8	759.50	29.774	76.6	70.7	.679	9 P. M.: (D. 63.)	82.	SW. by W.	.....	.....	..	Cu.-a., Ci-a., Cu. from W. by S.
	20	25.6	760.50	29.820	67.	66.	.637		85.	NW.	.....	.10	..	N.; Ci-cu., Cu.; rain.
	22	23.2	760.60	29.831	65.3	64.5	.598		85.4	.....	.....	.....	..	Ci-cu., Cu.

Day.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, Sths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
10	h. m.													
	0 25	23.2	760.75	29.837	66.8	66.	.629	3 A. M.: (D. 57.2)	89.5	.....	..	..	..	Clear.
	2 25	23.1	760.90	29.881	64.8	63.9	.585		89.4	.....	..	..	1	Clear.
	4 25	23.7	760.85	29.844	66.5	63.5	.524		82.8	.....	..	..	..	S. in Hor. SE., Ci. in NE.
	6 25	22.9	761.90	29.883	68.	63.5	.538	9 A. M.: (D. 60.)	82.4	.....	..	..	..	Clear.
	8 25	23.3	763.40	29.900	72.5	65.8	.560	(A. 75.6)	78.5	NW.	..	..	..	Clear, Exc. light S. in S.
	10 25	25.3	763.80	29.908	76.8	68.7	.607	(A. 75.6)	76.	WNW.	..	..	1	Clear, Exc. few small Cu. in Hor.
	12 25	26.6	763.80	29.900	79.2	68.6	.577	3 P. M.: (D. 61.)	71.	WNW.	..	..	2	Cu., Ci-cu. from W.
	14 25	28.	763.50	29.886	82.	70.5	.641	(A. 81.5)	71.8	NNW.	..	..	1	Cu., Ci-cu. from W.
	16 25	28.	763.50	29.882	81.2	71.1	.641	(A. 81.5)	71.2	NNW.	..	..	..	Cu., Ci-cu. from NW.
11	18 25	28.	763.50	29.882	81.	70.9	.636	9 P. M.: (D. 64.5)	81.3	.....	..	..	..	Clear.
	20 25	26.9	763.00	29.906	75.5	70.	.666		87.	.....	..	..	..	Clear.
	22 25	25.7	763.80	29.944	72.1	69.1	.673		90.	.....	..	..	..	Ci., Ci-cu., Cu.
	0 25	24.8	763.85	29.960	70.4	68.1	.658	3 A. M.: (D. 55.7)	90.5	.....	..	..	1	A few Cu. in N.
	2 25	25.	763.75	29.945	68.7	66.5	.623		87.3	.....	..	..	1	Ci., Cu. in N.
	4 25	24.6	763.75	29.947	67.2	64.8	.596		87.3	.....	..	..	..	Ci. in E., Cu. in SW.
	6 25	24.5	764.35	29.972	69.1	64.	.540	9 A. M.: (D. 57.)	82.8	NNE.	..	..	2	Clear, hazy in Hor.
	8 25	24.3	761.80	29.991	73.6	64.7	.512	(A. 77.6)	74.5	NE.	..	..	..	Clear.
	10 25	25.8	765.25	30.000	77.2	64.8	.475	3 P. M.: (D. 59.)	66.	N. by E.	..	..	..	Clear.
	12 25	27.6	764.85	29.977	80.	67.8	.541	(A. 83.5)	66.	NNW. by N.	..	..	..	Clear.
12	14 25	28.7	764.00	29.937	83.1	70.3	.592	(D. 60.5)	66.5	NNW.	..	..	..	Clear.
	16 25	29.3	763.95	29.933	84.	69.3	.548		64.5	NNW.	..	..	..	A few Cu. in Hor., NE. and W.
	18 25	29.5	763.95	29.936	79.5	69.4	.601	9 P. M.: (D. 60.5)	71.	NNW.	..	..	..	A few Cu. scattered.
	20 25	28.1	763.96	29.938	73.6	68.5	.635		83.	SE.	..	..	..	A few Cu. scattered.
	22 25	25.5	764.00	29.952	68.5	66.5	.626		86.2	.....	..	..	..

1940.

DAILY METEOROLOGICAL OBSERVATIONS.

JUNE.]

Day.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, in.		Dew point, Fah.	Hygr., Gaussner.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.					Dir. points.	Force, lbs.			
13	0	26.3	761.90	29.867	72.1	70.	.704	3 A. M.:	89.6	89.6	.....	.....	..	4	Cu a. running N. and S.
	2	25.7	760.85	29.828	69.3	67.1	.637	(D. 57.5)	90.	90.	.....	.....	..	1	Cu-a. in SW.
	4	25.	760.10	29.802	67.6	65.5	.636	.....	91.7	91.7	ESE.	.....	..	3	Cl. and Fl., S., scattered.
	6	25.1	759.95	29.796	70.	69.4	.707	9 A. M.:	90.9	90.9	ESE.	.....	.02	8	Fog and light rain.
	8	25	759.55	29.783	74.1	73.7	.778	(D. 68.5)	86.5	86.5	SE. by E.	.....	..	8	S, N.
	10	25	758.70	29.734	80.5	75.5	.813	(A. 78.)	85.	85.	SE. by E.	.....	..	8	Cu., Ci-cu., Cu-a.
	12	25	757.65	29.692	81.4	75.7	.810	3 P. M.:	88.	88.	SE. by E.	.....	1.08	8	N., Cu., rain.
	14	25	756.00	29.636	76.5	75.6	.861	(D. 70.)	86.6	86.6	SE. by S.	.....	..	8	N., rain.
	16	25	755.50	29.611	78.3	76.	.857	(A. 85.3)	86.5	86.5	S. by E.	.....	..	8	N., ceased rain.
	18	25	755.30	29.604	78.5	75.8	.847	9 P. M.:	87.5	87.5	SSE.	.....	..	8	N., Cu. Ci., from SW.
14	0	26.	755.30	29.599	76.5	75.5	.837	(D. 74.)	87.5	87.5	S.	.....	..	8	N., Cu. from SW.
	2	26.	754.70	29.582	76.	74.7	.832	3 A. M.:	87.9	87.9	S.	.....	..	7	Cl a., Cu.
	4	26.3	754.60	29.578	75.6	74.4	.835	(D. 72.5)	87.7	87.7	S. by W.	.....	..	8	Cu. from SW.
	6	26.4	754.95	29.594	73.9	73.	.791	.....	90.	90.	SSW.	.....	..	3	Cl., Cu., Ci-a.
	8	26.7	755.00	29.619	74.5	73.2	.792	9 A. M.:	87.3	87.3	W. by S.	.....	..	3	Cl., Cu.
	10	25	756.15	29.638	79.	72.5	.717	(D. 66.5)	80.	80.	W. by S.	.....	..	3	Clear.
	12	25	757.00	29.666	81.	73.	.677	(A. 85.3)	75.5	75.5	WNW.	.....	..	3	Cu., Ci.
	14	25	757.35	29.677	82.1	71.7	.653	3 P. M.:	73.	73.	W. by S.	.....	..	3	Cu., Ci-cu.
	16	25	757.50	29.678	84.6	72.5	.655	(D. 58.)	69.	69.	WNW.	.....	..	3	Cu., Ci-cu.
	18	25	757.80	29.691	84.2	69.9	.568	(A. 84.)	72.6	72.6	WNW.	.....	..	..	Some Cu.
22	20	26.3	758.50	29.723	80.	70.7	.642	9 P. M.:	83.5	83.5	WNW.	.....	..	..	Clear.
	22	26.5	759.90	29.787	88.9	87.5	.655	(D. 64.)	88.5	88.5	WNW.	Clear.

JULY.]

DAILY METEOROLOGICAL OBSERVATIONS.

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Date.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Danvers's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
15	0 25	25.5	760.25	29.805	68.9	67.	.698	3 A. M.: (D. 63.)	88.6	NW.	..	..	..	Clear.
	2 25	26.	760.40	29.810	67.5	66.1	.625		90.3	NW.	..	..	..	Clear.
	4 25	24.8	760.85	29.833	68.1	64.4	.564		84.2	NW.	..	..	1	Clear.
	6 25	25.2	761.95	29.874	70.9	65.8	.577	9 A. M.: (D. 64.)	82.1	NNW.	..	..	2	Number of fleecy clouds in NW.
	8 25	25.7	762.50	29.893	76.9	68.3	.592	(D. 64.)	75.5	NNW.	..	..	..	Clear, Exc. light S. in N.
	10 25	28.1	763.00	29.900	82.	69.	.580	(A. 81.)	68.	W.	..	..	..	Clear, Exc. light S. in N.
	12 25	30.	763.30	29.899	86.1	70.3	.558	3 P. M.: (D. 64.)	64.	W.	..	..	1	Cu., Ci-cu. from N.
	14 25	30.2	762.55	29.873	86.9	72.3	.621	(D. 64.)	64.5	WSW.	..	..	..	Few light Cu. from NNW.
	16 25	31.3	762.85	29.880	87.8	72.5	.618	(A. 91.)	63.2	W.	..	..	..	Ci., a few Cu.
	18 25	31.4	762.80	29.877	83.8	73.8	.712	9 P. M.: (D. 67.5)	72.3	SW.	..	..	..	Scattered Cu. in NW.
	20 25	30.1	763.00	29.890	77.1	72.1	.723		81.2	W.	..	..	..	Clear.
	22 25	29.6	763.30	29.905	74.8	71.6	.731		86.9	W.	..	..	..	Clear.
16	0 25	28.8	763.65	29.923	72.	69.	.671	3 A. M.: (D. 66.)	86.8	W.	..	..	..	Clear.
	2 25	27.9	763.65	29.927	71.5	69.1	.679		88.8	SW.	..	..	..	Clear.
	4 25	27.1	764.00	29.945	69.	67.5	.653		90.1	NW.	..	..	1	S. near the S., Ci-cu. near E.
	6 25	26.6	764.70	29.975	72.2	69.8	.695	9 A. M.: (D. 68.)	87.8	W.	..	..	3	Ci. in S.
	8 25	27.5	764.85	29.977	79.5	71.6	.678	(D. 68.)	78.5	SW.	..	..	..	Clear.
	10 25	29.	765.00	29.975	83.7	72.6	.668	(A. 81.3)	74.	SW.	..	..	..	Clear.
	12 25	30.7	764.65	29.954	87.3	72.6	.628	3 P. M.: (D. 63.5)	67.	WSW.	..	..	..	Cu. forming.
	14 25	32.	764.50	29.942	90.	73.5	.630	(D. 63.5)	65.5	WSW.	..	..	1	Cu.
	16 25	32.7	764.30	29.931	91.	74.9	.674	(A. 88.)	65.5	SW.	..	..	..	Clear.
	18 25	31.1	764.30	29.934	82.5	71.7	.649	9 P. M.: (D. 67.)	72.5	S. by W.	..	..	..	Clear, dark in Hor. N.
	20 25	28.5	764.25	29.943	75.8	69.6	.649		80.	S.	Clear.
	22 25	29.5	764.60	29.955	74.3	72.	.750		87.9	SSW.	Clear.

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DAILY METEOROLOGICAL OBSERVATIONS.

July.]

Day.	Hour.	Date.	Barometer.			Therm°s, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Centimet.	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
			Temp.	Obs'd height.	Corr. height.	Dry.	Wet.				Dir. points.	Force, lbs.			
17	0	25	28.7	764.60	29.961	72.7	71.3	.743	3 A. M.: (D. 67.5)	90.8	SSW.	..	..	1	S. in S., Cu. in SE.
	2	25	27.4	764.60	29.963	71.7	70.	.708	(D. 67.5)	89.8	SSW.	..	..	8	Cu-t. in S.
	4	25	26.8	764.60	29.970	72.5	71.6	.756	.....	90.8	S.	..	..	8	Overcast, dark.
	6	25	26.7	764.95	29.985	73.9	73.2	.798	9 A. M.: (D. 71.5)	90.3	S.	..	..	7	Foggy.
	8	25	27.	764.90	29.982	78.7	75.4	.828	(D. 71.5)	87.	SW.	..	..	5	Cu., Ci cu. from S.
	10	25	28.2	765.05	29.981	81.5	75.	.782	(A. 86.)	81.5	SW.	..	..	5	Cu., Ci-cu. from S.
	12	25	30.	764.40	29.947	84.7	76.3	.797	3 P. M.: (D. 71.)	78.	SW.	..	..	3	Cu. around Hor.
	14	25	31.6	763.85	29.918	88.	74.7	.799	(D. 71.)	71.5	SW.	..	..	2	Cu. from S.
	16	25	32.	762.75	29.873	89.8	76.9	.785	(A. 90.2)	70.1	SW.	..	..	..	Clear.
	18	25	30.2	762.50	29.870	82.3	75.7	.800	9 P. M.: (D. 69.7)	87.	S.	..	..	3	Cu. in E., N., and W.
18	20	25	30.4	762.85	29.884	77.5	73.8	.781	(D. 69.7)	87.	S. by W.	..	..	..	Cu-s., Ci. Ci-s.
	22	25	30.7	763.25	29.898	75.5	73.9	.807	.....	87.	S.	..	..	2	Cu. from SW.
	0	25	29.2	763.05	29.897	74.2	73.	.788	3 A. M.: (D. 67.5)	90.7	SSW.	..	..	2	S., Cu., Ci.
	2	25	27.8	762.00	29.863	74.3	72.9	.783	(D. 67.5)	90.5	SSW.	..	..	8	Overcast.
	4	25	26.8	762.15	29.873	75.	73.6	.801	.....	89.9	S.	..	..	8	Overcast, clouds from SW.
	6	25	26.7	762.65	29.902	77.5	74.6	.811	9 A. M.: (D. 74.)	87.5	SW.	..	..	7	Ci-cu. from SW.
	8	25	27.1	762.60	29.890	79.1	76.4	.893	(D. 74.)	88.	SSW.	..	..	8	Cu. from WSW.
	10	25	29.5	762.80	29.887	84.3	78.3	.893	(A. 69.5)	83.	SSW.	..	..	8	Cu., N. from WSW., thunder in W.
	12	25	26.	762.85	29.906	76.5	73.7	.788	3 P. M.: (D. 69.)	87.	N.	..	..	7	Cu. and Ci. in W., N. in N., S., and E.
	14	25	28.3	763.10	29.904	79.5	74.8	.797	(D. 69.)	86.	ENE.	..	..	8	Cu., Ci cu., Ci. from W.
19	16	25	26.6	763.00	29.907	76.	73.	.768	(A. 78.5)	86.	ESE.	..	..	8	N., Cu. raining, acid flying from E.
	18	25	26.	763.80	29.923	73.7	71.5	.739	9 P. M.: (D. 67.5)	89.	SSW.	..	.05	8	N., dark and raining.
	20	25	25.3	761.60	29.868	72.	70.2	.712	.....	91.	SW.	..	.04	8	Cu., N.
	22	25	26.7	763.00	29.873	71.	69.7	.706	.....	92.	W. by S.	..	..	8	Cu., N.

Day.	Date.		Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
	Hour.		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. point.	Force, lbs.			
20	0	25	23.5	762.00	29.883	69.8	62.	.472	3 A. M.: (D. 51.)	76.	N. by E. NNW.	..	..	5	Ci. Cu., Ci. in S.
	2	25	23.4	762.70	29.913	66.	58.4	.411	..	77.3	..	..	..	2	Clear.
	4	25	23.4	763.50	29.943	63.6	57.	.410	..	79.3	N. by W.	..	..	..	Clear.
	6	25	23.8	764.50	29.986	64.	57.7	.414	9 A. M.: (D. 52.)	78.6	N. by W.	..	..	..	Detached Cu. in Hor.
	8	25	23.	765.00	30.008	67.2	58.5	.401	(A. 86.5)	76.5	N. by W.	..	..	4	Cu., Ci-cu. from NNW.
	10	25	21.5	765.00	30.011	69.	58.5	.380	3 P. M.: (D. 54.)	70.5	NW.	..	..	3	Cu., Ci-cu. from N.
	12	25	23.	764.90	30.001	72.2	59.3	.366	..	67.	NW.	..	..	..	..
	14	25	23.7	765.80	30.033	73.5	58.8	.350	..	..	WNW.	..	..	6	Cu.
	16	25	23.7	764.50	29.981	73.3	59.9	.371	(A. 78.2)	64.4	WNW.	..	..	2	Cu.
	18	25	24.3	764.65	29.985	71.6	60.	.393	9 P. M.: (D. 53.5)	66.8	WNW.	..	..	..	A few Ci-cu. near Hor. W.
	20	25	23.1	764.70	29.993	63.5	57.5	.425	..	78.5	W.	..	..	..	Clear.
21	0	25	21.8	764.60	29.999	57.5	57.2	.473	3 A. M.: (D. 47.)	92.4	..	..	..	2	Ci. in SW.
	2	25	21.5	764.55	29.994	61.4	55.4	.381	..	84.5	..	..	..	..	Clear.
	4	25	21.	764.75	29.005	55.7	54.5	.410	..	77.6	..	..	..	..	Clear.
	6	25	20.7	765.00	30.015	62.4	56.1	.388	9 A. M.: (D. 53.)	87.2	NW. by W.	..	..	..	Clear.
	8	25	21.7	765.50	30.030	69.6	59.4	.399	(A. 76.3)	71.	WNW.	..	..	..	Clear.
	10	25	23.5	765.95	30.039	73.5	62.	.430	3 P. M.: (D. 53.)	68.5	WNW.	..	..	..	Clear.
	12	25	25.	765.50	30.014	77.4	64.4	.459	9 P. M.: (D. 53.)	66.5	WSW.	..	..	..	A few light Cu., hazy.
	14	25	26.5	765.45	30.005	79.	64.8	.454	(A. 86.5)	64.5	W.	..	..	3	Cu., Ci-cu. from N.
	16	25	27.5	765.10	29.986	80.8	66.4	.465	(A. 86.5)	64.5	WSW.	..	..	..	Light Cu., Ci-cu. from NW.
	18	25	27.6	765.15	29.992	75.6	65.6	.518	9 P. M.: (D. 59.)	70.5	SW. by S.	..	..	..	No clouds, hazy.
	20	25	23.7	765.30	30.013	69.5	64.5	.551	..	82.2	SW.	..	..	..	Heavy.
	22	25	21.	765.40	30.030	65.8	63.	.547	..	87.	SW.	..	..	..	Clear.

July.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.]

Day.	Hour.	Barometers.			Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Samsuit.	Wind.		Rain, inches.	Sky covered, Bks.	Clouds, &c.
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.				Dir. points.	Force, lbs.			
23	A. M.	19.5	765.50	30.041	62.2	61.1	.531	3 A. M.:	91.5	SW.	..	..	..	Clear.
	0 25	22.2	765.80	30.039	62.	60.3	.509	(D. 61.5)	90.1	NNW.	..	..	..	Clear.
	2 25	21.9	766.05	30.051	60.6	59.4	.500	..	91.3	NNW.	..	..	..	Clear.
	4 25	22.5	766.85	30.080	64.8	63.	.558	9 A. M.:	89.1	SW.	..	..	..	Clear.
	6 25	23.5	767.10	30.097	71.8	66.3	.582	(D. 62.5)	81.	SW.	..	..	..	Clear.
	8 25	25.5	767.25	30.080	77.6	66.9	.537	..	72.	SW.	..	..	..	Clear.
	10 25	27.8	767.25	30.070	80.4	68.2	.483	3 P. M.:	64.6	SW.	..	..	..	Clear.
	12 25	28.9	766.65	30.045	83.7	67.6	.503	(D. 57.5)	61.4	SW.	..	..	..	Clear.
	14 25	25.5	766.00	30.031	74.7	64.4	.490	(A. 87.5)	65.	SSW.	1	..	..	S. Ci. a. from W.
	16 25	24.6	766.10	30.040	69.6	63.3	.513	9 P. M.:	68.	S. by W.	..	..	..	Ci., S. from N.
23	18 25	25.1	765.90	30.030	66.2	62.8	.538	(D. 56.5)	72.	S. by W.	..	..	..	Ci., Ci. a.
	20 25	24.3	765.20	30.012	65.9	62.9	.558	..	86.	S.	..	..	..	Clear.
	22 25	23.9	764.65	29.976	69.2	66.5	.618	..	90.6	SW. by S.	..	..	..	S. Ci. a.
	0 25	24.8	765.20	30.007	64.4	62.9	.559	..	91.9	SW. by S.	..	..	..	Cu.
	2 25	23.5	763.40	29.928	75.	68.2	.596	..	91.5	S. by W.	..	..	..	Ci. a., Cu.
	4 25	24.5	762.55	29.894	77.2	70.	.646	..	88.	SSW.	..	..	..	Ci., Ci. a., Ci. cu.
	6 25	25.5	761.76	29.872	73.5	69.1	.654	3 P. M.:	81.	SSW.	1	..	..	Ci. a., Ci.
	8 25	24.5	760.30	29.809	74.	69.1	.652	(D. 67.)	81.7	S. by W.	1	..	..	S. Ci. a.
	10 25	24.5	758.55	29.774	70.6	68.5	.691	..	75.5	S.	1	..	..	S. Ci. a.
	12 25	24.5	758.55	29.774	70.6	68.5	.691	..	84.5	S. by E.	1	..	..	Overcast.
23	14 25	24.5	758.55	29.774	70.6	68.5	.691	..	80.5	S. by E.	1	..	..	Cu., Ci. cu. from S.
	16 25	24.5	758.55	29.774	70.6	68.5	.691	..	89.8	SE.	1	..	..	N. from S., raining.
	18 25	24.5	758.55	29.774	70.6	68.5	.691	..	91.9	SE.	1	..	..	N. from S., raining.
	20 25	24.5	758.55	29.774	70.6	68.5	.691	..	92.	SE.	4	.44	..	N. from S., raining very hard.

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

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Day.	Date.	Barometer.				Therm's, Fah.		Force of vapor, Ins.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.	Dir. points.				Force, lbs.				
24		h. m.													
	0	25	24.2	754.65	29.592	69.1	68.5	.686	3 A. M.	87.2	ENE.	..	.60	8	N., Cu., raining slowly.
	2	25	23.6	753.95	29.567	69.3	68.6	.689	(D. 62.5)	91.2	NW.	..	..	8	N., ceased raining.
	4	25	23.9	754.10	29.571	69.5	69.	.699	..	91.1	SW.	..	.01	8	N., raining lightly.
	6	25	24.2	754.65	29.592	70.9	69.8	.710	9 A. M.	89.6	W. by S.	..	..	7	Cu., clouds moving to E.
	8	25	24.8	755.15	29.608	75.	69.3	.648	(D. 67.)	81.	NW.	..	..	8	Cu., N. from NNW.
	10	25	25.	755.90	29.637	76.2	68.3	.601	(A. 76.)	77.	NW.	..	..	8	Cu., Cu-s, N.
	12	25	26.	756.00	29.636	77.6	69.	.609	3 P. M.	76.	NW.	1	..	8	Cu., Cu-s. from NW.
	14	25	27.	756.10	29.634	79.5	69.5	.605	(D. 65.)	73.5	NNW.	1	..	8	Cu., Ci., N. from S.
	16	25	26.	756.75	29.666	77.3	68.5	.595	(A. 83.)	75.	NNW.	2	..	6	Cu., Ci-cu.
	18	25	25.5	756.10	29.720	75.9	66.5	.544	9 P. M.	74.2	NNW.	2	..	3	Cu., Ci-cu., Ci-s, N.
	20	25	25.3	759.25	29.766	72.	63.5	.494	(D. 57.)	74.5	NNW.	1	..	1	Ci-s, Cu, N.
25															
	22	25	24.	759.95	29.801	70.3	62.5	.481	..	75.5	NNW.	1	..	6	N., Cu.
	0	25	23.7	760.75	29.834	67.	61.3	.481	3 A. M.	79.6	NNW.	..	..	1	Cu-s. in N., Cu. in S.
	2	25	23.1	761.10	29.850	66.	61.	.485	(D. 58.)	82.7	NNW.	..	..	1	S.
	4	25	21.9	762.95	29.901	64.2	60.4	.488	..	85.	NNW.	..	..	7	Numerous Ci. with Cu.
	6	25	23.	763.90	29.961	66.2	61.4	.495	9 A. M.	83.3	NNW.	..	..	7	Ci-s. and Cu.
	8	25	22.	765.25	30.018	69.8	62.7	.493	(D. 58.7)	79.	N.	..	..	3	Ci-s. from W.
	10	25	24.	765.25	30.009	73.4	65.5	.539	(A. 78.5)	77.	NE.	..	..	1	Ci., Ci-s. from SW.
	12	25	25.5	766.20	30.039	77.1	66.4	.526	3 P. M.	72.2	E.	..	..	1	Ci., Ci-s. from SW.
	14	25	27.	765.95	30.022	79.5	64.8	.448	(D. 57.)	64.5	NW.	..	..	4	Ci. from SW.
	16	25	27.7	765.80	30.014	82.2	65.6	.444	(A. 80.5)	61.8	N by W.	..	..	4	Clear, some Cu., Ci. cu., Ci-s. in SE.
	18	25	28.2	766.36	30.031	76.5	63.5	.443	9 P. M.	66.	ENE.	..	..	..	Few light Cu. in S. and SE.
20	25	24.	766.40	30.055	69.	64.7	.563	(D. 65.5)	84.	SE.	..	..	..	Clear, Ci. near Hor.	
22	25	25.6	767.15	30.076	65.9	63.2	.559	..	88.	..	..	..	..	Clear, few S. in N.	

1840

DAILY METEOROLOGICAL OBSERVATIONS

July.

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature.	Obs'd height, in.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
27	4 a.	24.5	769.25	30.136	68.4	84.4	560	3 A. M.:	86.3	S.	..	..	4	Cu. in SW. and N.
	6	25	767.80	30.118	65.1	82.8	549	(D. 56.3)	91.6	S.	..	..	5	Cu., Cu-a.
	8	25.3	768.00	30.121	62.5	81.3	432	..	92.2	..	..	..	6	Cu., Ci., Ci-a.
	10	25.4	768.55	30.141	66.	84.2	583	9 A. M.:	90.2	..	..	..	8	Ci., Ci-cu.
	12	25.7	769.90	30.154	72.8	88.	637	(D. 66.5)	84.	SW.	..	..	3	Ci., Ci-a.
	14	25.3	769.00	30.150	77.	88.7	684	(A. 84.)	78.5	SW.	..	..	2	Ci., Ci-a., Cu. from SW.
	16	25.3	768.70	30.130	80.1	87.5	529	3 P. M.:	71.5	SSW.	..	..	3	Cu., Ci., S.
	18	25.3	768.15	30.100	83.8	88.	504	(D. 64.)	65.	SW.	..	..	3	Cu., Ci., Ci-cu.
	20	25.3	767.50	30.089	85.2	89.5	588	(A. 87.)	66.5	SW.	..	..	3	Cu., Ci.
	22	25.5	767.25	30.071	78.5	89.	698	9 P. M.:	72.	WSW.	..	..	1	Cu., Ci.
28	0	24.6	767.95	30.108	72.5	88.5	647	(D. 62.)	86.	SSW.	..	..	..	Clear.
	2	24.6	767.45	30.083	68.3	86.7	635	..	91.	SSW.	..	..	..	Clear.
	4	25.2	766.60	30.057	67.5	86.	621	3 A. M.:	91.6	..	..	..	..	Clear.
	6	25.2	766.20	30.044	65.3	84.8	607	(D. 57.)	92.8	..	..	..	2	Clear, but dark.
	8	24.8	765.25	30.015	66.7	85.9	627	9 A. M.:	91.2	..	..	..	2	Ci., Ci-a.
	10	24.3	765.85	30.032	73.8	70.4	698	(D. 64.)	85.	S.	..	..	..	Ci., Ci-a. near Hor.
	12	26.5	765.40	30.083	78.5	70.7	637	(A. 80.6)	78.	SSW.	1	..	1	Cu., Ci., Ci-cu., Ci-a. from SW.
	14	27.5	764.80	29.963	81.	70.8	634	3 P. M.:	74.	SSW.	1	..	1	Cu., Ci., Ci-cu. from SW.
	16	29	763.50	29.916	84.4	74.5	731	(D. 69.)	75.	SSW.	1	..	4	Cu., Ci-cu. from W.
	18	30.4	762.30	29.962	86.9	77.	812	(A. 80.)	76.2	SSW.	2	..	5	Cu., Ci-cu. from W.
29	0	28.3	761.15	29.827	80.2	75.	797	9 P. M.:	85.8	S.	1	..	6	Cu., Ci-cu. from W.
	2	28.3	761.50	29.841	78.8	73.	737	(D. 68.5)	86.	SSW.	..	..	..	N., Ci-a.
30	25	28.2	761.00	29.822	76.9	73.	768	..	86.	SW. by W.	N.

JULY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.]

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Day.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., saturation.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
29	y.													
	0	27.7	760.40	29.801	78.	73.	.746	3 A. M.:	85.5	WSW.	1	.	4	Cu., Cu-s
	2	27.5	760.05	29.788	78.8	72.1	.704	(D. 62.)	83.3	WSW.	.	.	4	Dark Cu. and N.
	4	27.4	760.65	29.812	77.3	71.	.682	.	83.2	W. by S.	.	.	8	N., Cu. and Ci.
	6	27.2	761.55	29.848	75.4	71.8	.730	9 A. M.:	87.	SW. by W.	.	.01	8	N., Cu., raining.
	8	27.5	761.90	29.861	79.7	72.8	.720	(D. 67.)	82.6	WSW.	.	.	4	Cu., Ci., S., Cu s.
	10	28.	762.25	29.872	81.	67.6	.523	(A. 86.)	70.	WNW.	1	.	6	Cu., Ci., Ci-cu., Ci s. from W.
	12	29.	762.20	29.855	83.7	65.8	.435	3 P. M.:	61.	WNW.	1	.	6	Ci., Cu. from W.
	14	30.	762.00	29.852	85.5	67.	.454	(D. 60.)	60.5	WNW.	1	.	3	Ci., Cu., Ci-s.
	16	30.6	761.80	29.842	86.7	68.	.474	(A. 88.)	60.	WNW.	.	.	3	Ci., Cu., Ci cu. from W.
	18	30.3	762.40	29.866	80.1	*73.5	†.741	9 P. M.:	68.	SW. by S.	.	.	1	Ci., Cu. with Cu s.
	20	25.9	762.90	29.908	72.3	66.5	.585	(D. 63.)	81.	.	.	.	.	Clear, a few Cu. and Ci.
30	22	24.3	763.25	29.929	67.	64.9	.592	.	90.2	.	.	.	2	Clear, a faint aurora.
	0	22.8	763.55	29.948	68.7	62.4	.496	3 A. M.:	82.1	N. by W.	.	.	2	Cu.
	2	22.7	763.95	29.964	66.3	61.3	.490	(D. 57.5)	85.2	N.	.	.	2	N., very light rain.
	4	23.2	764.90	30.000	65.2	61.2	.499	.	87.3	NNE.	.	.	5	Cu., Ci., N.
	6	23.3	765.85	30.036	66.	62.	.514	9 A. M.:	87.2	NNE.	.	.	6	Ci., Cu.
	8	24.5	766.40	30.053	74.7	65.5	.525	(D. 58.5)	77.	NNE.	.	.	1	Ci., Cu s.
	10	26.	766.85	30.064	77.2	66.	.513	(A. 84.)	73.5	ENE.	.	.	.	Light Ci., a few detached Cu.
	12	27.6	767.00	30.061	80.8	67.6	.524	3 P. M.:	70.5	E.	.	.	.	Ci., Cu., Ci-cu., very hazy.
	14	29.	766.40	30.031	88.4	67.2	.482	(D. 56.2)	68.	SW.	✓	.	2	Ci., Cu., Ci-cu., very hazy.
	16	29.7	766.25	30.022	84.2	69.1	.538	(A. 88.)	66.9	SW.	.	.	2	Ci., Cu., Ci-cu.
	18	25	27.	766.70	30.012	77.	.558	9 P. M.:	73.9	SW. by W.	.	.	8	Ci., Cu., Ci cu., N.
	20	26.3	766.90	30.024	74.	67.	.581	(D. 60.5)	81.2	SW. by S.	.	.	6	Ci., Cu., N.
22	25.6	766.00	30.031	73.1	68.	.624	.	84.2	S. by W.	.	.	.	Clear.	

* Probably 68.5.

† Probably .506

[1940.

DATA METEOROLOGICAL OBSERVATIONS

July.]

Day.	Hour.	Barometer.			Therm's, Fahr.		Force of vapor, in.	Dew point, Fahr.	Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, etc.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
31	0	25.3	765.95	30.031	69.2	66.4	.615	3 A. M.: (D. 57.5)	89.8	SSW.	..	..	4	Cu.
	2	25.1	765.75	30.023	67.2	65.5	.609		91.8	SE. by S.	..	..	2	Cu.
	4	25.3	766.00	30.032	69.7	68.6	.683		92.6	SE. by S.	..	..	..	Dense fog, sky invisible.
	6	25.3	766.30	30.046	70.5	69.6	.708	9 A. M.: (D. 58.5)	88.4	ENE.	..	..	..	Dense fog, sky invisible.
	8	24.8	766.30	30.047	73.7	70.8	.714	(D. 58.5)	86.5	NE.	..	..	6	Cu., Ci-cu. from E.
	10	26.	766.70	30.058	77.	73.8	.749	(A. 55.)	84.5	E. by S.	..	..	8	Cu., Ci-cu. from E.
	12	27.5	766.20	30.030	80.7	73.7	.741	3 P. M.: (D. 65.5)	80.	ESE.	..	..	8	Cu. with N. E.
	14	27.	765.80	30.016	78.5	72.	.703	(A. 80.2)	79.2	SE.	..	..	8	Cu., Ci cu. N.
	16	26.3	765.40	29.999	79.1	71.	.661		85.6	ESE.	..	..	8	N., Cu., Ci., Cu-a.
	18	26.3	764.45	29.967	76.1	71.6	.716	9 P. M.: (D. 64.)	86.	ESE.	..	..	..	Clear, scattered Cu.
	20	25.4	764.80	29.985	73.4	68.5	.649		86.	ESE.	..	..	..
	22	25.2	765.85	30.027	74.	69.7	.672		86.	ENE	..	..	..

Date.		Barometer.				Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaumere's.	Wind.		Rain, inches.	Sky covered, eigh.	Clouds, &c.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Dir. points.				Force, lbs.				
1	A.	W.	25.7	764.05	29.954	71.3	70.	.713	3 A. M.:	91.2	E. by N.			8	N., raining lightly.
	0	25	25.5	763.35	29.928	70.5	69.3	.698	(D. 61.)	92.3	ENE.			8	N., ceased raining.
	2	25	25.2	763.00	29.914	69.4	68.	.686	(A. 67.5)	91.7	NE.			8	N., scattered.
	4	25	24.6	763.35	29.931	69.2	68.	.688	9 A. M.:	92.4	NNE.			2	N., Cu., showers.
	6	25	24.	763.50	29.940	73.	69.8	.687	(A. 83.5)	88.	NE.			8	Cu., N. from ENE.
	8	25	24.	763.85	29.946	76.5	69.8	.648	3 P. M.:	80.	NE. by N.			8	Cu., Ci., Ci-cu., N.
	10	25	25.5	763.20	29.905	81.2	70.	.635	(D. 65.)	76.	E.			8	Cu., Ci., Ci-cu. from E.
	12	25	27.	763.60	29.939	79.2	70.	.645	(A. 82.)	74.	SE.			7	Cu., Ci., Ci-cu. from W.
	14	25	28.5	763.20	29.905	81.2	71.2	.645	9 P. M.:	71.	S.			2	Cu.
	16	25	29.5	763.50	29.914	84.5	70.7	.591	(D. 66.5)	84.3	SSE.			3	N., Cu., light rain.
	18	25	27.	763.80	29.947	74.1	71.7	.741		86.2	SE. by S.		.04	1	N. in NW. and N.
	20	25	26.	763.50	29.925	77.3	72.	.693		90.	SE. by S.			3	Clear.
	3	22	25	25.4	764.25	29.963	71.2	69.4	.693	3 A. M.:	91.3	SSW.			3	Cu. in N.
0		25	23.6	761.35	29.858	71.6	70.	.709	(D. 66.)	92.8	S.			4	Large Cu.
2		25	25.9	761.10	29.837	71.6	70.5	.737		90.8	SW. by S.			3	Ci. and Cu.
4		25	25.2	760.85	29.831	70.6	69.4	.700	9 A. M.:	89.9	SW. by S.	1		7	Ci. and Cu.
6		25	25.6	761.10	29.838	72.2	70.	.703	(D. 69.)	85.	SW. by W.	2		8	Cu., Ci-cu.
8		25	25.5	760.90	29.831	.77.	72.5	.739	(D. 69.)	86.	W.	1		8	Hard rain, thunder.
10		25	25.5	760.70	29.823	73.3	69.	.656	(A. 78.3)	89.	SW.	1		8	Cu. from SW.
12		25	26.4	760.00	29.792	76.9	73.	.758	3 P. M.	81.	SW.	2		5	Cu., Ci-cu. from SW.
14		25	28.4	759.50	29.762	81.5	74.7	.771	(D. 69.5)	81.1	SW.	1		8	Cu., Ci., N. from SW.
16		25	28.1	759.10	29.747	81.	74.1	.764	(A. 86.)	91.	SSW.	4		8	N. from SW., rain hard.
18		25	25.	759.10	29.762	71.1	68.5	.663	9 P. M.:	90.	S.	1		7	N., clear in W.
20		25	26.3	759.90	29.788	71.7	70.5	.726	(D. 67.)	91.1	WSW.			7	Clear.
22		25	25.6	759.90	29.791	69.4	68.	.666							

* Recorded 767.50.

[1840.

DAILY METEOROLOGICAL OBSERVATIONS.

August.]

Day.	Hour.	Barometer.				Therm'n, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Rosemount.	Wind.		Rain, inches.	Sky covered, eths.	Clouds, &c.
		Temperature, centigrade.	Old height, millimetres.	Corr. height, inches.		Dry.	Wet.				Dir. points.	Force, lbs.			
4	h. m.														
	0 25	24.6	759.95	29.798		70.7	69	.686	3 A. M.: (D. 65.)	91.3	.....	.....	.....	6	Cu., N. Some N. in Hor. E. Cu. and S., foggy.
	2 25	24.8	759.80	29.791		70.	69.2	.699	.....	91.4	.....	.....	.....	1	Foggy. Cl., Cu. from SW.
	4 25	24.2	759.90	29.798		67.4	66.8	.649	9 A. M.: (D. 69.)	92.6	NW.	.....	.....	1	Cl-cu. from SW.
	6 25	24.7	760.75	29.830		69.8	69.5	.712	(A. 76.3)	80.7	WSW.	.....	.....	2	Cl-cu. from SW.
	8 25	26.	760.55	29.820		70.6	72.3	.742	3 P. M.: (D. 68.)	87.6	WSW.	.....	.....	4	Cl-cu. from SW.
	10 25	27.3	760.45	29.805		80.5	73.4	.697	(A. 84.5)	77.9	WSW.	1	.....	5	N., Cu., Cl-cu. from SW.
	12 25	28.7	759.60	29.764		82.3	71.6	.648	9 P. M.: (D. 67.)	80.	WSW.	1	.....	7	N., rain since last observation.
	14 25	29.4	759.65	29.763		83.5	75.9	.795	.....	87.	WSW.	1	.....	8	N., partially clear in NW.
	16 25	28.6	757.75	29.693		81.	76.	.827	.....	92.2	WNW.	1	.....	6	Cu., Cu.
5	20 25	27.3	758.75	29.738		78.	71.	.739	3 A. M.: (D. 70.5)	91.7	SW.	.....	.....	8	N., Cu.
	22 25	27.3	758.60	29.732		73.1	71.1	.731	.....	92.	SW.	.....	.....	6	N., Cu.
	0 25	26.6	758.05	29.713		73.	71.5	.747	.....	91.6	SW.	.....	.....	5	Cl-cu.
	2 25	26.7	757.85	29.706		73.5	72.4	.774	9 A. M.: (D. 62.5)	87.3	W.	.....	.....	1	Cu., Cl.
	4 25	26.5	757.75	29.703		73.7	73.7	.783	(A. 76.)	73.7	NW.	.....	.....	6	Cl., Cl-cu., Cu.
	6 25	27.	758.25	29.719		74.	70.5	.700	3 P. M.: (D. 61.)	70.7	WNW.	.....	.....	1	Cl., Cu., Cl-cu.
	8 25	26.9	758.55	29.737		76.	68.4	.606	(A. 82.)	68.9	W.	.....	.....	1	Clear, a few Cl. and Cl-cu.
	10 25	26.8	759.90	29.766		77.6	67.5	.560	9 P. M.: (D. 56.)	84.8	WSW.	.....	.....	1	Clear.
	12 25	27.4	758.20	29.716		80.	67.4	.529	.....	86.	WSW.	.....	.....	1	Clear.
	14 25	28.4	758.10	29.707		83.	69.4	.663	.....	.....	.....	.....	.....	1	Clear.
	16 25	29.3	757.75	29.790		84.	71.	.608	.....	.....	.....	.....	.....	1	Clear.
	18 25	28.7	757.95	29.795		78.	69.5	.621	.....	.....	.....	.....	.....	1	Clear.
	20 25	26.	758.85	29.736		68.4	66.4	.634	.....	.....	.....	.....	.....	1	Clear.
	22 25	24.7	758.90	29.758		67.	63.1	.637	.....	.....	.....	.....	.....	1	Clear.

4th, at 19h. 30m., wind NW. by W.: force 6 lbs., and continues about 10 minutes.

Day.	Date.	Barometer.			Therm's, Fah.		Force of vapor, Ins.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, Sths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6	h. m.													
	0 25	25.2	758.80	29.761	69.7	61.6	.463	3 A. M.: (D. 58.5)	77.8	WSW.	..	..	1	Cu.
	2 25	25.3	758.65	29.741	67.6	60.9	.465		79.8	W. by N.	..	..	..	Clear.
	4 25	24.1	758.50	29.744	66.9	60.8	.470		80.7	SW. by W.	..	..	5	Ci. cu.
	6 25	24.	758.20	29.732	68.2	64.4	.563	9 A. M.: (D. 59.5)	82.9	SW. by W.	..	..	6	Cu., Ci., Ci. cu.
	8 25	24.9	757.95	29.718	75.2	66.7	.659		78.4	W.	..	..	..	Cu., Ci. cu.
	10 25	26.5	757.85	29.707	79.6	69.6	.608	(A. 76.3)	78.1	SW.	..	..	3	Ci. cu., Ci. a. in E. Hor.
	12 25	28.	756.20	29.635	80.2	68.5	.563	3 P. M.: (D. 61.)	71.4	WSW.	2	..	4	Ci. cu., Ci. a. from SW.
	14 25	29.3	755.75	29.643	83.1	68.8	.541	(A. 82.)	67.3	WSW.	2	..	5	Ci. cu., Cu. from SW.
	16 25	28.4	755.25	29.595	83.7	70.9	.607		71.5	WSW.	1	..	..	A few Ci. cu.
	18 25	26.3	754.75	29.587	78.5	68.5	.582	9 P. M.: (D. 62.5)	74.9	WSW.	1	..	1	Ci., Ci. a., Cu.
	20 25	25.8	754.65	29.585	74.6	68.1	.611		83.	SW.	1	..	6	Ci., Cu., Ci. cu.
7	0 25	25.9	755.00	29.598	72.8	69.9	.693	3 A. M.: (D. 61.)	89.6	W. by S.	1	..	8	Dark Cu., with Ci.
	2 25	25.7	756.00	29.637	70.5	65.9	.685		85.1	NW. by N.	..	..	8	Cu., N.
	4 25	25.2	756.65	29.666	69.9	64.1	.655		83.2	NW. by N.	..	..	8	Cu., N.
	6 25	23.8	757.95	29.724	68.5	63.9	.544	9 A. M.: (D. 61.5)	82.8	NW. by N.	..	..	8	Cu., N.
	8 25	23.8	758.55	29.747	68.5	64.5	.563		85.2	NW. by W.	..	..	7	Cu., Ci. cu., Ci. a.
	10 25	23.7	758.45	29.743	68.2	60.2	.439	(A. 91.5)	78.3	NW. by W.	..	..	8	Cu., N., some rain.
	12 25	24.	758.30	29.736	68.6	60.6	.446	3 P. M.: (D. 59.)	79.4	NW. by W.	..	..	8	Cu., N., Ci. cu., raining.
	14 25	23.	758.40	29.741	67.2	61.9	.499	(A. 73.)	81.	WSW.	..	..	8	N., Cu., Ci., Ci. cu., Ci. a., from W.
	16 25	21.8	758.60	29.759	64.	59.1	.454		84.2	SW. by S.	..	.02	8	N., Cu., Ci. cu.
	18 25	21.6	758.00	29.736	65.5	60.5	.477	9 P. M.: (D. 56.)	84.2	SW. by S.	..	.02	8	Cu., N.
	20 25	21.8	758.20	29.743	62.5	59.6	.484		88.1	SW. by S.	..	..	8	Cu., N.
	22 25	21.9	758.25	29.745	62.5	59.9	.492		89.2	W. by S.	..	..	8	Cu., N.

DAILY METEOROLOGICAL OBSERVATIONS.

Answer]

Day.	Hour.	Barometer.			Therm°s, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Sammets.	Wind.		Rain, inches.	Sky covered, Six.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
8	0	21.3	757.95	29.736	62.4	60.7	.517	3 A. M.: (D. 53.4)	90.9	W. by S.	..	..	8	N., raining.
	2	20.9	757.40	29.717	61.8	60.	.503	..	92.	N. by W.	..	.02	8	N., raining.
	4	20.7	757.10	29.705	61.6	59.4	.489	..	89.8	N. by W.	..	..	8	N., Cu., ceased rain.
	6	20.7	757.85	29.735	62.	59.	.486	9 A. M.: (D. 59.5)	89.4	N. by W.	..	.01	7	Cl. and Cl.-cu.
	8	21.1	757.85	29.733	66.3	62.3	.521	(A. 68.5)	85.4	NNW.	..	..	7	Cu., Cl.
	10	22.7	758.00	29.753	72.1	68.	.570	3 P. M.: (D. 51.)	81.6	NNW.	..	..	7	Cu., N.
	12	24.5	758.50	29.742	75.2	64.2	.479	..	70.6	WNW.	1	..	6	Cu., N.
	14	25.6	758.40	29.732	76.6	63.6	.445	(D. 51.)	67.5	WNW.	1	..	1	Cu., Cl.
	16	26.1	758.75	29.744	77.5	61.2	.363	(A. 71.)	68.5	NW.	1	..	1	Cu., Cl.
	18	24.5	759.65	29.787	71.5	62.5	.468	9 P. M.: (D. 51.)	73.9	NW by N.	..	..	3	Cl.-cu., Cu., a few Cl.
10	20	22.5	761.15	29.845	63.2	60.	.488	..	84.	NW by N.	..	..	..	Clear.
	22	22.9	761.45	29.866	63.3	58.6	.458	..	85.5	NW by N.	..	..	..	Clear.
	0	19.8	766.60	30.082	59.9	56.5	.428	3 A. M.: (D. 51.)	88.9	N.	..	..	..	Clear.
	2	20.4	766.90	30.091	56.6	54.3	.407	..	89.2	NE.	..	..	..	Clear.
	4	20.2	767.35	30.111	54.9	53.1	.395	..	91.6	NE.	..	..	1	A few Cl. in NE.
	6	20.3	768.40	30.151	57.5	55.1	.418	9 A. M.: (D. 56.)	90.3	ENE.	..	..	..	Clear.
	8	20.3	768.40	30.151	66.2	59.7	.446	(A. 68.)	80.1	S.	..	..	2	Cl., Cu.*
	10	22.3	768.55	30.147	70.7	61.6	.451	3 P. M.: (D. 54.)	76.7	W.	1	..	2	Cl., Cl.-cu. in N., Cu.
	12	23.6	768.15	30.125	73.7	62.7	.449	..	70.2	NW.	1	..	2	Cu., Cl.
	14	25.	767.60	30.098	75.7	63.4	.448	(A. 70.)	68.3	W.	1	..	5	Cu., Cl., Cl.-cu., N.
18	16	25.3	767.40	30.082	77.6	63.8	.496	9 P. M.: (D. 55.)	69.6	W.	..	..	8	Cl., Cl.-cu., Cu., Cl.-cu., N.
	18	25.7	767.30	30.081	72.1	63.	.476	..	74.5	W.	..	..	7	Cl., Cl.-cu., Cl.-cu., Cu.
	20	23.4	767.15	30.086	67.	63.	.533	..	85.9	W.	..	..	3	Cl., Cl.-cu., Cl.-cu.
	22	22.6	766.90	30.071	63.8	61.5	.524	..	89.	W.	..	..	7	Cu., Cl., Cl.-cu.

* 10th, 6A. 26m., clouds as follows: "Four principal waving linear cirri, not unlike the feathers of the ostrich; two of them extending 120° from north to south, all proceeding from a cumulus. Also, other cirri."

Day	Hour	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, Sigs.	Clouds, &c.
		Temperature, centigrade,	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
11	A. M.	23.2	766.70	30.062	64.4	62.	.532	3 A. M.: (D. 58.)	89.9	SW.	..	..	7	N., Ci-cu.
	0 25	23.	766.20	30.053	66.	64.	.575	(D. 58.)	92.1	SW.	..	..	8	Cu., Ci., N., Ci-cu.
	2 25	23.7	765.55	30.027	64.5	63.3	.571	.....	94.	SW.	..	..	7	Cu., Ci., Ci-cu., Cu-a
	4 25	21.9	765.50	30.028	66.6	65.	.599	9 A. M.: (D. 64.5)	93.6	W.	..	..	7	Ci., Cu., Ci cu.
	6 25	23.2	765.40	30.019	73.	68.5	.642	(A. 73.)	86.5	W. by N.	1	..	6	Cu., Ci., Ci-cu.
	8 25	25.	765.20	30.002	76.1	70.	.659	3 P. M.: (D. 64.)	83.2	W. by N.	..	..	7	Cu., Ci., Ci-cu.
	10 25	26.2	764.40	29.968	78.2	70.7	.661	(A. 74.)	80.8	W. by N.	..	..	5	Cu., Ci., Ci cu.
	12 25	27.2	763.35	29.918	80.2	70.6	.634	(D. 59.)	71.	SW.	..	..	7	N., Cu., Ci-cu.
	14 25	26.6	762.50	29.898	77.7	69.1	.610	9 P. M.: (D. 64.)	67.5?	SW.	1	..	8	N., Ci., Cu., Ci-cu. from W.
	16 25	24.7	762.85	29.898	71.3	66.6	.599	(A. 74.)	86.	E.	1	..	8	N., Cu., Cu s., raining lightly.
	18 25	24.4	762.50	29.913	70.1	66.5	.608	(D. 59.)	89.1	E.	..	.02	8	N., raining hard.
12	20 25	24.3	762.90	29.915	66.	64.5	.590	.....	91.2	E.	..	.14	8	N., Cu.
	22 25	23.6	762.75	29.913	65.4	64.3	.591	3 A. M.: (D. 55.5)	92.2	E.	..	..	4	Cu., Ci-cu., Cu-s.
	0 25	23.8	761.25	29.858	64.	63.1	.570	.....	93.3	E.	..	..	4	Ci., Ci-a
	2 25	21.8	761.05	29.855	63.	62.5	.562	.....	92.3	E.	..	..	..	S., N.
	4 25	21.9	761.45	29.871	68.	65.5	.622	9 A. M.: (D. 68.2)	90.9	E.	..	..	..	Thick fog.
	6 25	22.7	761.50	29.869	71.1	69.	.617	(A. 74.)	90.1	NE.	..	..	8	Slightly overcast, Ci-s., Cu.
	8 25	24.9	761.45	29.857	76.	71.6	.711	(A. 74.)	86.	SE.	..	..	8	Ci., Ci-a., Cu., slight fog.
	10 25	26.7	760.80	29.822	79.5	72.7	.717	3 P. M.: (D. 68.)	80.5	SSW.	..	..	8	Ci-cu., Ci., Cu.
	12 25	23.2	759.65	29.869	83.6	74.6	.744	(D. 68.)	76.5	SW.	1	..	7	Ci-cu., Ci., Cu.
	14 25	29.	759.35	29.753	83.8	73.2	.689	(A. 84.)	76.8	SW.	..	..	8	N., Cu., Ci., Ci-cu. from SW.
	16 25	27.2	759.30	29.747	78.8	72.	.700	9 P. M.: (D. 61.)	80.6	S.	..	..	8	Cu., Ci-cu., Ci-a., Cu-a
20	25	26.4	759.50	29.759	76.6	71.6	.711	.....	84.3	SW. by W.	..	..	8	N., Ci-a., Cu-a
	22 25	26.2	760.35	29.807	69.6	68.6	.682	.....	.....	NE.	1	.25	8	N., raining tremendously.

[1840.

DAILY METEOROLOGICAL OBSERVATIONS.

August.]

Day.	Hour.	Barometer.			Therm°s. Fahr.		Force of vapor, in.	Dew point, Fahr.	Hygr., Gauss's.	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
		Temp., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
13	4 m.													
	0	25.3	759.65	29.784	72.3	65.6	.557	3 A. M.: (D. 62.)	92.7	S.	..	.08	8	N., raining hard at intervals.
	2	24.7	758.80	29.748	67.7	67.4	.665		90.1	SSW.	..	.28	8	N., rain, hard and constant.
	4	24.5	758.70	29.750	68.	67.6	.668		92.4	SSW.	..	.25	8	N., thunder storm.
	6	23.7	758.60	29.764	68.1	67.8	.666	9 A. M.: (D. 69.)	92.8	SSE.	..	.25	8	Still raining hard.
	8	23.7	758.35	29.740	71.2	69.1	.683		88.8	SW. by W.	1	.03	6	N., Ci-qu., Cu-a.
	10	24.1	758.00	29.724	73.5	71.5	.741	(A. 74.)	88.3	SSE.	1	.27	8	N., Cu., raining.
	12	25.	756.90	29.691	74.6	71.5	.730		88.4	SE.	1	..	8	N., Cu.
	14	24.7	755.95	29.642	73.	71.2	.736		88.2	E. by S.	1	..	8	N., raining.
	16	23.4	754.70	29.599	71.4	70.3	.722		92.2	SSE.	5	1.00	8	N., raining very hard.
	18	24.3	754.20	29.576	71.6	71.1	.745	9 P. M.: (D. 67.5)	92.3	SSE.	1	1.00	8	N., Ci-ca. from S.
	20	24.3	753.60	29.552	71.1	70.2	.722		92.3	S.	1	..	8	N., Ci-a., raining.
14	22	24.	753.15	29.535	72.6	70.5	.716		90.3	SSW.	..	.06	8	N.
	0	23.7	753.55	29.562	72.1	68.9	.766		88.8	W.	..	..	8	N., Cu., Ci., Ci-a.
	2	23.6	753.75	29.565	69.3	66.4	.614	3 A. M.: (D. 59.)	87.5	W.	..	..	8	N., Ci-ca., S., Ci-a.
	4	21.2	754.15	29.589	67.7	64.4	.569		86.9	NW.	..	..	8	N., Cu., Cu-a., Ci-ca.
	6	21.8	755.35	29.632	67.7	65.2	.594		89.4	W.	1	..	8	Cu., Ci., Ci-a.
	8	21.9	756.00	29.657	70.	66.1	.597	9 A. M.: (D. 65.)	86.5	NW.	1	..	5	Cu., Ci-a.
	10	23.	756.85	29.685	72.1	65.8	.575	(A. 71.)	82.2	WNW.	1	..	4	Cu., Ci-ca., Ci., Ci-a.
	12	24.	756.80	29.675	75.6	67.2	.672	3 P. M.: (D. 64.)	79.3	WNW.	..	..	3	Cu., Ci-ca., Ci., Ci-a.
	14	26.1	757.00	29.676	78.4	67.3	.644		75.2	WNW.	..	..	1	Ci-ca., Cu., Ci.
	16	27.9	757.50	29.687	80.5	66.5	.494	(A. 78.)	68.	WNW.	1	..	1	Ci-ca.
	18	27.8	758.35	29.720	78.	67.7	.594	9 P. M.: (D. 63.2)	77.5	WNW.	..	..	6	Ci., Ci-ca., dark Cu. in NW.
	20	25.3	759.55	29.779	71.	68.2	.585		88.5	WNW.	..	..	6	N., Cu., Cu-a.
	22	24.7	760.10	29.804	70.5	67.8	.643		88.4	WNW.	..	..	7	N., Cu.

* Recorded 704.70.

Day.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
15	a. m.													
	0 25	23.6	760.65	29.832	68.5	65.9	.608	3 A. M.: (D. 65.)	90.	W.	..	..	6	Ci., Cu., Cu-s.
	2 25	22.7	760.75	29.840	66.2	64.1	.576		91.4	NW.	..	..	1	Ci., Cu-s.
	4 25	22.6	761.70	29.877	65.	62.6	.544		86.5	NNW.	..	..	..	Clear, a small Ci-s.
	6 25	22.5	762.70	29.916	64.7	62.2	.535	9 A. M.: (D. 60.)	89.	N.	..	..	..	Clear, a few very small Ci.
	8 25	23.2	763.75	29.954	70.9	68.6	.507		79.1	ENE.	..	..	1	Clear, Ci., Ci-s.
	10 25	24.5	764.60	29.981	73.5	65.4	.535	(A. 74.)	75.2	E.	..	..	4	Clear, Ci., Ci-s.
	12 25	25.7	764.60	29.972	77.5	65.6	.497	3 P. M.: (D. 61.)	71.2	NE.	..	..	2	Clear, Ci., Ci-s.
	14 25	27.7	764.50	29.963	80.5	68.2	.519		68.2	E.	..	..	1	Cu., Ci.
	16 25	28.5	764.35	29.953	82.	70.6	.613	(A. 78.)	71.	ENE.	..	..	1	Cu., Ci-s.
	18 25	..	764.30	..	74.5	67.6	.595	9 P. M.: (D. 59.7)	78.1	E.	..	..	2	Ci., Ci-s., Ci-cu.
	20 25	24.4	765.35	30.011	70.	64.	.580		81.	SE.	..	..	..	Cl. Exc. Ci-cu. in NW. and some faint Ci.
	22 25	23.9	765.10	30.003	65.3	63.5	.568		89.	NE.	..	..	4	Ci., and in Hor. Ci-s.
	2 25	21.8	770.15	30.212	65.5	64.3	.590	3 A. M.: (D. 62.)	90.9	NE.	..	..	3	Ci., Cu.
	4 25	22.7	770.35	30.215	64.3	63.4	.576		92.2	NE.	..	..	1	Ci., Ci-s., Cu.
	6 25	22.5	770.75	30.232	64.8	63.6	.575		91.2	NE.	..	..	8	Cu., Ci-cu.
17	8 25	22.9	771.75	30.269	65.6	64.	.579	9 A. M.: (D. 66.)	90.	NE.	..	..	7	Ci., Cu., Ci-s., Ci-cu.
	10 25	23.4	772.10	30.281	71.9	67.4	.618		84.2	ENE.	..	..	7	Ci., Ci-s.
	12 25	25.	772.40	30.284	75.	69.8	.664	(A. 72.)	84.4	ENE.	..	..	6	Cu., Ci., N.
	14 25	26.2	772.85	30.297	77.8	70.	.639	3 P. M.: (D. 64.)	79.	ENE.	..	..	6	Cu., Ci., N.
	16 25	27.7	772.55	30.277	80.2	70.9	.644		74.6	ENE.	..	..	6	Ci., Cu., Ci-s.
	18 25	27.5	772.00	30.257	79.2	70.	.624	(A. 77.)	74.9	ESE.	..	..	3	Cu. inclined to N.
	20 25	25.7	771.85	30.262	72.6	65.	.532	9 P. M.: (D. 61.)	75.3	SSE.	1	..	1	Ci-cu. and Ci-s. in Hor. W.
	22 25	25.7	772.40	30.281	73.	62.3	.445		82.	SE.	..	..	..	S. in W. and NW., clear.
	24 25	24.3	772.35	30.286	62.9	61.3	.528		90.3	SE.	..	..	..	Clear.

August.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.]

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, in.	Dew point, Fahr.	Hygr., Beauméf.	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
		Temperature.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. point.	Force, lbs.			
18	A. M.													
	0 25	22.	772.25	30.322	63.1	61.4	.529	3 A. M.: (D. 58.5)	90.7	SE.	..	..	8	Cl., Cu., Ci cu., Ci.
	2 25	21.5	771.80	30.279	62.1	61.2	.529		92.8	SE.	..	..	8	Cl., Ci-s., Cu.
	4 25	21.5	771.90	30.280	62.4	61.2	.531	9 A. M.: (D. 63.5)	93.2	SE.	..	..	8	Cl., Cu., Ci-cu., Cu-s.
	6 25	21.2	772.40	30.303	63.5	62.	.542		91.3	SE.	..	..	8	Cl., Ci-s., Cu.
	8 25	21.6	772.60	30.308	66.4	65.2	.585	(D. 63.5)	86.2	SE.	..	..	7	Cl., Cu., Ci-s., Ci-cu.
	10 25	22.6	772.70	30.307	71.5	65.8	.570	(A. 71.)	82.4	SE.	..	..	7	Cl cu., Ci-s., Cu., Ci.
	12 25	24.	772.20	30.281	74.	64.7	.507	3 P. M.: (D. 64.)	75.6	W.	..	..	3	Cl-cu., Ci-s., Cu., Cl.
	14 25	26.2	771.40	30.239	78.4	67.1	.533		73.4	W.	..	..	1	Cu., Ci-s., Ci.
	16 25	27.3	771.00	30.217	79.8	68.9	.578	(A. 77.)	73.2	SSW.	..	..	..	Cu. around Hor.
19	18 25	26.5	770.30	30.194	73.5	67.9	.616	9 P. M.: (D. 63.)	79.5	W. by S.	..	..	..	Cu. near Hor. SW.
	20 25	25.1	770.40	30.205	67.7	66.	.587		86.2	W. by S.	..	..	..	Clear.
	22 25	24.2	770.25	30.204	66.8	64.3	.586		91.	W. by S.	..	..	..	Clear.
	0 25	23.1	769.85	30.194	64.	63.1	.570	3 A. M.: (D. 59.8)	91.5	W. by S.	..	..	2	Cl.
	2 25	23.3	769.70	30.186	65.	63.6	.573		91.8	W. by S.	..	..	1	Clear, very few clouds.
	4 25	22.4	769.25	30.174	63.7	63.	.570		92.5	W. by S.	..	..	2	Cl., Ci-s.
	6 25	21.8	769.30	30.179	65.5	64.3	.590	9 A. M.: (D. 62.)	89.3	W. by S.	..	..	3	Cl., Ci-s.
	8 25	23.4	769.10	30.163	72.8	67.1	.597		83.3	W. by S.	..	..	2	Cl. and light Cu.
	10 25	24.6	769.20	30.162	76.4	68.2	.594	(A. 73.)	78.2	W. by S.	..	..	2	Cl-s., Ci., Cu.
	12 25	25.7	768.50	30.129	77.3	68.5	.593	3 P. M.: (D. 61.)	74.	SW.	..	..	2	Cl-s., Ci., Cu.
20	14 25	27.8	767.40	30.075	80.6	68.4	.563		73.2	SSW.	..	..	3	Cl., Cu., Ci-s., Ci-cu.
	16 25	28.5	766.75	30.047	81.8	69.1	.566	(A. 81.5)	69.2	WSW.	..	..	4	Cl.
	18 25	27.5	766.40	30.038	78.4	68.1	.569	9 P. M.: (D. 64.5)	73.	SW.	..	..	2	S., Ci-s. in W., Ci-cu.
	20 25	25.6	766.15	30.037	72.	66.6	.591		81.2	SW.	..	..	..	Cl-s. in NW., auroral light in N.
	22 25	24.	766.00	30.039	70.7	67.6	.698		88.	SW.	S., and aurora continues in N. and NW.

August.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.]

[97]

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Date.	Hour.	Barometer.			Therm're, Fah.		Force of vapor, ins.	Dew point, Fabr.	Hygr., Saunures's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
20	20	23.5	765.70	30.030	69.	87.2	.644	3 A. M.: (D. 60.6)	90.2	SW.	..	..	1	Clear, Exc. few Ci.
	2 25	23.6	764.95	29.999	67.2	65.9	.623		90.9	SW.	..	..	1	Clear, Exc. Ci-a.
	4 25	23.1	765.00	30.003	66.5	65.2	.607		90.8	SW.	..	..	1	Clear, Ci., Ci-a.
	6 25	24.7	765.15	30.005	70.2	87.1	.627	9 A. M.: (D. 66.5)	91.1	SW.	..	..	1	Clear, Ci., Ci-a.
	8 25	24.8	765.05	29.997	74.3	69.7	.669	(D. 66.5)	88.	SW.	..	..	2	Clear.
	10 25	26.	764.70	29.978	79.6	73.1	.731	(A. 77.2)	82.5	SW.	..	..	2	Cu., Ci., Ci-cu.
	12 25	27.8	764.45	29.960	82.1	73.2	.707	3 P. M.: (D. 63.5)	77.5	S. by W.	..	..	3	Cu., Ci.
	14 25	28.7	763.80	29.929	82.9	72.2	.663	(D. 63.5)	74.9	S. by W.	1	..	3	Cu., Ci.
	16 25	30.	763.70	29.919	84.5	73.2	.682	(A. 83.)	79.5	SW.	..	..	2	Cu., Ci-a.
	18 25	28.6	763.30	29.910	80.6	73.3	.739	9 P. M.: (D. 66.5)	77.	SW.	..	..	3	Ci-a. in W., hazy.
21	20 25	25.9	763.90	29.947	74.5	71.	.712		87.2	SW.	..	..	..	Clear.
	22 25	26.3	763.90	29.945	73.5	70.	.686		89.1	S.	..	..	..	Clear.
	0 25	25.2	764.10	29.959	71.2	69.	.690	3 A. M.: (D. 63.)	88.9	SW.	..	..	..	Clear.
	2 25	23.9	763.85	29.954	69.1	67.3	.646		92.5	SW.	..	..	..	Clear.
	4 25	28.1	763.65	29.951	67.1	65.5	.610		91.9	SW.	..	..	1	Ci., Ci-a., Cu-a.
	6 25	23.2	764.00	29.964	68.9	67.6	.668	9 A. M.: (D. 66.5)	88.5	S.	..	..	1	Ci., Ci-a.
	8 25	24.7	764.10	29.961	74.3	71.1	.718	(D. 66.5)	88.5	SW.	..	..	4	Ci., Ci-a., Cu.
	10 25	26.5	764.50	29.968	78.7	74.2	.732	(A. 74.7)	88.3	SW.	..	..	6	Cu., N.
	12 25	28.3	764.35	29.953	82.	74.	.738	3 P. M.: (D. 69.5)	82.	SSW.	1	..	6	N., Cu.
	14 25	29.5	763.70	29.922	83.7	75.4	.774	(D. 69.5)	79.1	SW.	..	..	6	Cu., N.
22	16 25	30.6	763.40	29.904	86.	76.8	.804	(A. 81.8)	79.1	SSW.	..	..	6	Cu., Ci.
	18 25	27.7	763.10	29.906	77.8	73.4	.763	9 P. M.: (D. 64.)	87.1	SW.	..	..	1	Ci-cu., Ci-a.
	20 25	27.8	763.50	29.922	73.8	70.6	.706		91.	S.	..	..	..	Clear.
23	25	27.	763.60	29.930	71.3	69.	.679		90.2	S.	..	..	..	Clear.

August 7

DAILY METEOROLOGICAL SUMMARY

1960

Date	Hour	Barometer		Therm °F.		Force of vapor, in.	Dew point, F.	Hyg., percent	Wind		Rain, inches	Sky covered, %	Clouds, &c.
		Temp., centigrade	Old height, millimetres	Corr. height, inches	Dry	Wet			Dir. points	Force, lbs.			
22	0 35	26.1	763.50	29.930	71.2	69.6	700	8 A. M.: 91.8	S.	...	...	...	Clear.
	2 25	24.5	762.95	29.917	70.6	69.	696	(D. 66.) 92.3	S.	...	...	...	Clear.
	4 35	22.9	763.00	29.926	69.9	68.5	676	9 A. M.: 94.1	S.	...	...	4	Clear.
	6 25	23.7	763.75	29.952	72.2	70.3	718	(D. 66.) 92.3	SE. by S.	...	...	?	Slightly overcast.
	8 25	25.1	764.00	29.955	75.1	72.7	766	(D. 68.) 90.2	SE.	...	...	?	Slightly overcast, and a little misty.
	10 25	26.3	764.20	29.957	78.	73.8	775	(A. 74.9) 88.4	SSW.	...	...	5	Cu., Ci-cu., Ci.
	12 25	28.3	763.66	29.925	82.4	75.5	791	3 P. M.: 83.7	SSW.	...	...	5	Heavy Cu., Ci-cu., Ci.
	14 25	29.6	762.75	29.894	84.2	76.7	819	(D. 70.5) 80.2	SW.	...	...	6	Cu., Ci-a., Ci-cu., Ci.
	16 25	31.1	762.35	29.861	87.1	76.	760	(A. 84.) 77.8	SW.	...	...	4	Cu., Ci-cu., Ci-a.
	18 25	29.9	762.15	29.859	81.3	75.9	819	9 P. M.: 85.	SSW.	...	...	...	Ci-cu. in NW.
	20 25	27.	762.20	29.875	77.	73.5	775	(D. 71.) 88.6	SSW.	...	...	...	Clear.
	22 25	27.2	762.40	29.881	74.9	73.	780	94.	S.	...	...	...	Clear.
24	0 25	25.	759.85	29.792	68.3	66.7	635	3 A. M.: 94.1	SW. by W.	...	...	6	Large Cu and N.
	2 25	22.9	759.60	29.793	67.	64.5	579	(D. 63.) 90.7	W. by S.	...	...	6	N., large thick Cu.
	4 25	22.7	759.65	29.795	66.7	63.5	552	9 A. M.: 89.9	W. by N.	...	...	7	Cu., Ci-cu., S., N.
	6 25	22.9	760.45	29.827	68.1	63.1	547	9 A. M.: 89.2	NW.	...	...	5	Ci., Ci-cu., N.
	8 25	23.4	761.50	29.865	69.9	65.	563	(D. 61.5) 86.	NW.	...	...	1	S., Cu., Cu-a.
	10 25	24.3	761.85	29.875	74.2	66.7	570	(A. 72.) 91.4	WNW.	...	...	1	Cu., Ci-a., Ci.
	12 25	25.4	761.40	29.851	76.7	67.1	564	3 P. M.: 77.4	WNW.	...	...	1	Cu., Ci-cu., Ci.
	14 25	27.1	760.90	29.824	79.7	67.6	538	(D. 58.5) 73.2	WNW.	...	...	1	Cu., Ci., Ci-a.
	16 25	28.	761.50	29.843	81.	69.2	578	(A. 79.) 72.8	WNW.	...	...	1	Cu., Ci-cu., Ci-a.
	18 25	24.1	761.15	29.833	74.8	68.1	609	9 P. M.: 79.7	SW.	...	...	2	Ci-cu., Ci-a., with N. in S.
	20 25	25.2	761.50	29.856	69.5	67.	631	86.5	SW.	...	...	...	Clear.
	22 25	23.8	761.40	29.859	67.5	66.4	634	(D. 63.) 90.9	SW.	...	...	1	S. and N.

* Recorded 79.2.

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Beaumé's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
27	h. m.	22.2	765.50	30.087	59.	57.9	.476	3 A. M.: 91.3	91.3	E.	..	..	1	Cu-s.
	0 25	20.6	765.30	30.037	57.1	56.5	.458	(D. 56.8)	93.4	E.	..	..	3	N.
	2 25	20.2	765.10	30.021	59.	58.	.478	..	93.7	E.	..	..	8	Overcast, dark.
	4 25	20.1	765.30	30.080	60.	59.	.495	9 A. M.: 92.9	92.9	E.	..	..	7	Ci-cu., Ci., Cu.
	6 25	20.4	765.25	30.025	66.1	62.6	.531	(D. 58.5)	96.4	E.	..	..	6	Cu., Ci-cu., Ci.
	8 25	22.4	764.85	30.002	70.7	64.5	.538	..	90.	ENE.	..	..	3	Cu., Ci., Ci-s.
	10 25	24.1	764.60	29.983	73.7	64.3	.493	..	80.	ENE.	..	..	5	Cu., N., Ci.
	12 25	25.3	764.20	29.963	76.	66.	.526	3 P. M.: 75.3	75.3	NW.	..	..	4	Ci-s, Cu., Ci., Ci-cu.
	14 25	26.1	764.15	29.956	77.8	66.1	.509	(D. 54.5)	72.8	NE.	..	..	3	Ci., Ci-s, dark Cu.
	16 25	24.7	764.50	29.977	71.1	64.1	.521	9 P. M.: 80.1	71.9	E.	1	..	2	Ci., dark Cu., and Ci-s.
	18 25	25.2	764.65	29.980	67.3	63.	.530	(D. 56.)	83.9	ESE.	..	..	2	Clear, few light Ci.
	20 25	24.3	764.60	29.982	68.	61.5	.533	..	88.9	ESE.	..	..	3	N.
28	0 25	22.7	764.35	29.980	62.9	60.8	.514	3 A. M.: 90.1	90.1	E.	..	..	8	N.
	2 25	22.3	764.10	29.972	63.	61.3	.527	(D. 59.8)	91.	ENE.	..	..	8	N., dense.
	4 25	22.1	764.35	29.983	63.5	62.	.542	..	91.8	ENE.	1	..	8	N., raining slightly.
	6 25	20.1	764.55	30.001	64.3	62.5	.546	9 A. M.: 91.3	91.3	NE.	..	..	8	Cu., N.
	8 25	22.2	765.00	30.007	70.7	67.	.619	(D. 64.)	86.9	ENE.	..	..	8	Cu., Ci-cu., N., S.
	10 25	24.3	765.20	30.005	74.4	68.2	.617.	(A. 74.)	82.7	ESE.	1	..	6	N. Cu., Ci-s, Ci-cu.
	12 25	25.2	765.15	29.999	76.8	69.2	.623	3 P. M.: 82.	82.	ESE.	1	..	6	N. Cu., Cu-s, Ci-s, Ci.
	14 25	26.3	764.95	29.987	77.5	69.	.609	(D. 61.5)	79.4	E.	1	..	7	N. Cu., Cu-s, Ci-s, Ci.
	16 25	27.	764.90	29.981	78.5	69.2	.605	(A. 77.2)	77.3	E. by S.	1	..	5	Cu., N., Ci-s.
	18 25	25.4	764.75	29.983	73.9	67.	.582	..	80.9	E.	..	..	4	Ci-s, Ci-cu.
	20 25	24.4	765.55	30.019	70.3	66.2	.596	..	84.9	E.	..	..	4	Dark Cu.
	22 25	23.	765.60	30.028	67.5	65.5	.606	..	93.2	E.	Clear, Exc. some Ci-s. in N. and W.

Answer.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

[97]

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Day.	Hour.	Barometer.				Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
		Temperature,	Obs'd height,	millimetres.	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
29	0	20.3	765.35		30.031	65.5	64.5	.596	.....	92.7	E.	..	..	8	Thick heavy clouds.
	2	20.8	764.75		30.007	64.7	63.7	.590	.....	93.	E.	..	..	8	N., Cu-a.
	4	20.3	765.00		30.016	65.3	64.6	.601	.....	92.3	ENE.	..	..	..	Thick fog.
	6	21.1	765.75		30.043	67.5	66.2	.637	9 A. M.: (D. 61.5)	90.9	ENE.	..	..	8	No clouds, slight mist.
	8	25	766.20		30.052	71.5	68.7	.665	9 A. M.: (D. 61.5)	86.5	E.	..	..	8	Cl-cu., Cu.
	10	25	766.50		30.054	75.6	71.5	.700	(A. 74.2)	85.5	S. by E.	..	..	5	Cl-s., Cu.
	12	25	766.20		30.037	76.5	69.5	.636	3 P. M.: (A. 74.2)	81.	E.	..	..	7	Cu. from S.
	14	25	765.75		30.014	78.7	70.	.630	(D. 61.5)	77.2	SE.	..	..	8	Cu. from S.
	16	25	765.60		30.013	77.2	70.7	.672	(A. 77.2)	79.5	SE.	1	..	8	Cu-a.
	18	25	765.70		30.025	74.1	67.5	.697	9 P. M.: (D. 63.)	81.2	S.	..	..	8	N.
	20	25	766.30		30.038	71.5	67.9	.639	.....	86.9	SE.	..	..	8	N.
	22	25	766.36		30.045	70.7	68.5	.668	.....	91.2	SE.	..	..	8	N.
	0	25	762.40		29.895	71.	69.7	.706	3 A. M.: (D. 57.5)	92.2	S. by W.	..	..	2	N., Cl-cu.
	2	25	761.65		29.868	71.8	69.5	.690	.....	88.4	SW.	..	..	7	N.
	4	25	761.30		29.853	72.5	71.	.734	.....	89.1	WSW.	..	..	8	N.
	6	25	761.55		29.863	74.4	71.7	.738	9 A. M.: (D. 67.5)	93.9	WSW.	..	..	8	N.
	8	25	761.75		29.869	75.4	73.9	.770	9 A. M.: (D. 67.5)	90.3	SW.	..	..	8	Cu., N.
	10	25	761.90		29.865	79.2	73.8	.763	(A. 76.)	85.1	W. by S.	..	..	7	N., Cu. Cl-a., Cl.
	12	25	761.75		29.863	81.3	73.2	.717	3 P. M.: (A. 76.)	80.3	SW.	..	..	7	N., Cu., Cl., Cl-cu., Cl-a.
	14	25	761.00		29.823	81.5	73.	.707	(D. 64.5)	79.4	W.	..	..	7	N., Cu., Cl., Cl-cu., Cl-a.
	16	25	761.05		29.821	82.4	69.4	.669	(A. 82.)	74.1	WNW.	1	..	2	Cl-cu. from SW.
	18	25	761.70		29.860	72.7	67.	.696	9 P. M.: (A. 82.)	81.	NW.	..	..	4	Cu., Cl-a.
	20	25	762.35		29.898	68.1	61.	.462	(D. 48.5)	78.	NW. by N.	..	..	..	Clear.
	22	25	761.60		29.864	63.7	58.3	.434	.....	78.5	NW. by N.	..	..	..	Clear.
31	0	25	765.35		30.031	65.5	64.5	.596	.....	92.7	E.	..	..	8	Thick heavy clouds.
	2	25	764.75		30.007	64.7	63.7	.590	.....	93.	E.	..	..	8	N., Cu-a.
	4	25	765.00		30.016	65.3	64.6	.601	.....	92.3	ENE.	..	..	..	Thick fog.
	6	25	765.75		30.043	67.5	66.2	.637	9 A. M.: (D. 61.5)	90.9	ENE.	..	..	8	No clouds, slight mist.
	8	25	766.20		30.052	71.5	68.7	.665	9 A. M.: (D. 61.5)	86.5	E.	..	..	8	Cl-cu., Cu.
	10	25	766.50		30.054	75.6	71.5	.700	(A. 74.2)	85.5	S. by E.	..	..	5	Cl-s., Cu.
	12	25	766.20		30.037	76.5	69.5	.636	3 P. M.: (A. 74.2)	81.	E.	..	..	7	Cu. from S.
	14	25	765.75		30.014	78.7	70.	.630	(D. 61.5)	77.2	SE.	..	..	8	Cu. from S.
	16	25	765.60		30.013	77.2	70.7	.672	(A. 77.2)	79.5	SE.	1	..	8	Cu-a.
	18	25	765.70		30.025	74.1	67.5	.697	9 P. M.: (D. 63.)	81.2	S.	..	..	8	N.
	20	25	766.30		30.038	71.5	67.9	.639	.....	86.9	SE.	..	..	8	N.
	22	25	766.36		30.045	70.7	68.5	.668	.....	91.2	SE.	..	..	8	N.
	0	25	762.40		29.895	71.	69.7	.706	3 A. M.: (D. 57.5)	92.2	S. by W.	..	..	2	N., Cl-cu.
	2	25	761.65		29.868	71.8	69.5	.690	.....	88.4	SW.	..	..	7	N.
	4	25	761.30		29.853	72.5	71.	.734	.....	89.1	WSW.	..	..	8	N.
	6	25	761.55		29.863	74.4	71.7	.738	9 A. M.: (D. 67.5)	93.9	WSW.	..	..	8	N.
	8	25	761.75		29.869	75.4	73.9	.770	9 A. M.: (D. 67.5)	90.3	SW.	..	..	8	Cu., N.
	10	25	761.90		29.865	79.2	73.8	.763	(A. 76.)	85.1	W. by S.	..	..	7	N., Cu. Cl-a., Cl.
	12	25	761.75		29.863	81.3	73.2	.717	3 P. M.: (A. 76.)	80.3	SW.	..	..	7	N., Cu., Cl., Cl-cu., Cl-a.
	14	25	761.00		29.823	81.5	73.	.707	(D. 64.5)	79.4	W.	..	..	7	N., Cu., Cl., Cl-cu., Cl-a.
	16	25	761.05		29.821	82.4	69.4	.669	(A. 82.)	74.1	WNW.	1	..	2	Cl-cu. from SW.
	18	25	761.70		29.860	72.7	67.	.696	9 P. M.: (A. 82.)	81.	NW.	..	..	4	Cu., Cl-a.
	20	25	762.35		29.898	68.1	61.	.462	(D. 48.5)	78.	NW. by N.	..	..	..	Clear.
	22	25	761.60		29.864	63.7	58.3	.434	.....	78.5	NW. by N.	..	..	..	Clear.

1840.

DAILY METEOROLOGICAL OBSERVATIONS.

SEPTEMBER.]

Day.	Hour.	Temperature, centigrade.	Barometer.		Therm°s, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Rosemount.	Wind.		Rain, inches.	Sky, overcast, etc.	Clouds, &c.
			Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. point.	Force, lbs.			
1	0	24.1	763.05	29.931	63.1	56.	.493	3 A. M.: (D. 64.)	80.9	NNW.	..	..	8	Clear.
	2	25	763.05	29.926	63.4	57.3	.431		81.9	NNW.	..	..	8	Overcast.
	4	19.8	763.80	29.947	58.3	55.7	.425		89.	NNW.	..	..	7	N., Cu.
	6	25	764.20	29.989	59.	57.	.451	9 A. M.: (D. 50.6)	90.3	NNW.	..	..	4	Cl., Cl.-s., Cu.
	8	21.3	764.80	30.005	68.8	58.8	.391		74.5	NW.	1	..	6	Cl.-s., Cl., Cl.-cu.
	10	25	764.70	29.996	71.3	60.3	.404	(A. 68.6)	71.5	NW.	1	..	6	Cu., Cl.-cu., Cl., S.
	12	23.2	764.10	29.967	72.9	60.1	.363	3 P. M.: (D. 49.6)	69.5	WNW.	1	..	6	Cu., Cl.-cu., Cl.-s., Cl.
	14	24.3	763.30	29.926	74.7	63.	.417		67.5	WNW.	1	..	6	Cu., Cl.-cu., Cl.-s., Cl.
	16	24.3	763.55	29.940	73.	61.4	.418	(A. 72.2)	68.6	NW.	1	..	8	Cl., Cl.-s., N., Cu.
	18	23.4	763.20	29.931	67.	60.	.445	9 P. M.: (D. 53.)	77.9	NW.	..	..	7	Cl., Cl.-s., Cl.-cu.
2	20	23.4	763.20	29.931	60.7	58.	.459		89.2	NW.	..	..	2	Light N.
	22	25	..	..	57.8	57.3	.469		91.6	NW.	..	..	3	Light N.
	0	25	762.30	29.901	57.3	56.7	.463	8 A. M.: (D. 56.2)	93.3	NW.	..	..	8	Slightly overcast.
	2	20.5	761.20	29.866	57.7	56.6	.455		91.2	NW.	..	..	3	N.
	4	20.7	760.80	29.851	57.8	56.9	.463		92.3	NW.	..	..	3	Cl.-cu., Cu., N.
	6	25	760.55	29.846	59.9	58.5	.483		93.2	S.	..	..	7	Cl., Cl.-s., Cu.
	8	21.	759.75	29.807	68.7	65.5	.533	9 A. M.: (D. 61.)	87.4	S. by W.	1	..	6	Cl.-s., Cl., Cl.-cu.
	10	25	759.20	29.775	74.3	66.3	.553	(A. 71.6)	77.4	SSW.	3	..	6	Cu., Cl.-cu., Cl., Cl.-s.
	12	25	758.50	29.738	76.9	66.	.583	3 P. M.: (D. 64.6)	78.7	SW.	1	..	6	Cu., Cl., Cl.-s.
	14	25	757.85	29.708	78.	67.9	.567		70.5	SSW.	1	..	5	Cu., Cl.-cu., Cl.-s.
	16	25	757.00	29.707	80.5	67.1	.613	(A. 78.3)	71.5	SSW.	1	..	4	Cu., Cl., Cl.-cu., Cl.-s.
3	18	25	757.60	29.701	73.3	66.5	.673	9 P. M.: (D. 67.)	79.	SW.	..	..	6	N., Cl. from W.
	20	25	758.55	29.741	68.	66.8	.643		91.3	NNW.	1	..	8	N. from W., raining.
22	25	25.	758.75	29.749	66.5	65.	.601		98.	NW.	..	.10	8	N., ceased raining.

Date.	Hour.	Barometer.			Therm°s, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
3	a. m.													
	0 25	23.7	759.35	29.778	65.3	61.5	.508	3 A. M.: (D. 58.5)	85.8	NNW.	..	..	8	Heavily overcast.
	2 25	23.4	759.76	29.796	65.1	60.4	.478		83.	NW.	..	..	8	Heavily overcast.
	4 25	22.2	760.25	29.821	63.5	58.5	.442		81.8	NNW.	..	..	8	Heavily overcast.
	6 25	21.5	761.15	29.860	63.4	57.5	.425	9 A. M.: (D. 49.)	81.9	NNW. by N.	..	..	7	N., Cu., Ci., Cu-s., S.
	8 25	19.	761.45	29.884	62.8	57.7	.428	(D. 49.)	83.5	NNW.	..	..	7	N., Cu., Ci., Cu-s., Ci-s.
	10 25	20.3	762.15	29.905	65.2	58.5	.388	(A. 68.)	70.5	N. by W.	..	..	8	N., Cu., S.
	12 25	21.6	762.76	29.922	66.4	58.2	.379	3 P. M.: (D. 45.)	71.9	NNW.	..	..	8	N., Cu., S.
	14 25	20.7	762.36	29.911	66.6	56.5	.352	(D. 45.)	70.5	WNW.	2	..	8	N., Cu., S.
	16 25	20.7	762.00	29.897	67.	57.7	.381	(A. 68.)	71.	WNW.	..	..	8	Cu., N., Ci., Ci-s.
	18 25	20.8	762.50	29.916	64.9	59.9	.465	9 P. M.: (D. 52.)	79.9	WNW.	..	..	6	Dark Ci-cu., Ci-s.
	20 25	20.3	763.60	29.961	60.2	58.4	.476		91.5	WNW.	..	..	6	Dark Cu., Ci., Ci-s.
4	22 25	20.2	764.15	29.984	57.2	55.	.418		91.	WNW.	..	..	2	Ci-cu., Ci-s.
	0 25	19.8	764.45	29.998	55.	53.3	.399	3 A. M.: (D. 51.2)	90.2	NNW.	..	..	..	Clear.
	2 25	18.8	764.20	29.998	53.2	51.5	.374		90.9	NNW.	..	..	..	Clear.
	4 25	17.6	764.30	30.003	53.2	49.9	.385		85.8	N. by W.	..	..	..	Cu., Cu-s.
	6 25	17.1	765.36	30.045	52.5	49.4	.331	9 A. M.: (D. 48.)	86.1	N.	..	..	1	Ci., Ci-s., Cu.
	8 25	17.	765.45	30.051	60.	54.	.361		81.1	NE.	1	..	6	Ci-cu., Ci-s., N., S.
	10 25	18.4	765.90	30.062	63.2	56.2	.383		78.4	NE.	..	..	7	N., Ci-cu., Cu., Ci-s.
	12 25	18.6	765.86	30.069	63.6	56.4	.383	3 P. M.: (D. 48.5)	77.9	NE.	1	..	8	N., Ci-cu., Ci., Cu., Ci-s.
	14 25	19.5	765.40	30.037	64.6	57.4	.399		77.4	NNE.	..	..	7	N., Ci-cu., Ci., Cu., Ci-s.
	16 25	19.5	765.00	30.021	64.6	57.6	.405	(A. 64.)	78.3	NNE.	..	..	7	N., Cu.
	18 25	18.	764.90	30.025	61.5	56.4	.407	9 P. M.: (D. 50.)	81.1	NE. by E.	1	..	8	N., Ci-s., Cu., Ci-cu.
	20 25	19.	764.60	30.007	59.1	55.6	.412		86.5	NE. by E.	..	..	8	N., raining slightly.
	22 25	19.	764.25	29.993	57.1	54.7	.411		90.6	NE. by E.	..	..	8	N., raining fast.

* Recorded 73.6.

DAILY METEOROLOGICAL OBSERVATIONS.

September.]

Day.	Hour.	Baromet'r.			Therm'rs, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
5	0 25	18.7	764.10	29.990	56.6	54.8	.419	3 A. M.: (D. 52.)	90.4	NE.	1	.10	8	N., raining.
	2 25	17.8	763.35	29.984	56.5	55.5	.439	(D. 52.)	93.4	N.	1	..	8	N., raining.
	4 25	17.7	763.90	29.947	56.3	57.	.458	..	91.9	NNE.	1	..	8	N., raining.
	6 25	17.4	762.40	29.929	59.1	57.5	.463	9 A. M.: (D. 54.)	89.2	NE.	1	..	8	N., raining, clouds moving from NE.
	8 25	17.8	761.95	29.910	61.1	58.2	.461	(D. 54.)	88.1	ENE.	..	..	8	N., passing to SW.
	10 25	18.3	762.15	29.914	57.2	57.1	.474	..	88.5	NNE.	1	.14	8	N., passing to SW., raining.
	12 25	18.6	762.00	29.906	59.2	58.6	.493	3 P. M.: (D. 48.5)	88.4	NNE.	1	.11	8	N., passing to SW., raining.
	14 25	18.9	761.50	29.886	58.9	58.5	.494	(D. 48.5)	87.9	NNE.	..	.10	8	N., passing to SW., raining.
	16 25	17.1	761.25	29.884	58.7	57.5	.468	(A. 58.7)	91.	N. by E.	..	.03	8	N., passing to SW., raining.
	18 25	18.	761.95	29.909	57.3	56.5	.453	9 P. M.: (D. 51.5)	92.8	NE.	..	.03	8	N., Ci-a. from NE., raining.
7	20 25	17.8	762.10	29.915	58.	56.1	.438	(D. 51.5)	90.	N. by E.	..	..	8	N., ceased raining.
	22 25	17.5	762.20	29.920	57.2	56.	.445	..	88.8	N. by E.	..	..	7	Cu., N.
	0 25	18.	767.00	30.107	55.4	53.7	.404	3 A. M.: (D. 50.)	89.1	WNW.	..	..	..	Clear.
	2 25	18.2	767.30	30.117	53.5	52.3	.391	(D. 50.)	91.1	NNW.	..	..	..	Clear.
	4 25	17.8	767.75	30.138	55.6	53.	.386	..	87.9	NNW.	..	..	..	Clear.
	6 25	17.4	768.66	30.174	55.	53.3	.399	9 A. M.: (D. 53.)	90.1	NNW.	..	..	..	Clear.
	8 25	18.3	769.00	30.184	63.6	58.5	.441	(D. 53.)	88.3	N. by E.	..	..	..	Ci-a. in NW. and in Hor. N. and W.
	10 25	20.2	769.20	30.183	67.4	61.4	.481	(A. 63.7)	80.	E.	..	..	1	Ci-a. in NW. and in Hor. N. and W.
	12 25	22.4	768.60	30.148	71.6	61.6	.440	3 P. M.: (D. 53.9)	71.4	SSW.	..	..	2	Ci-a., Cu., Ci.
	14 25	..	..	..	..	..	..	(D. 53.9)	..	WSW.	..	..	..	Fleecy clouds.
9	16 25	24.9	767.75	30.102	75.1	64.3	.479	(A. 73.)	68.5	SW.	..	..	1	Fleecy clouds and Ci-a.
	18 25	23.5	767.50	30.100	69.6	62.6	.493	9 P. M.: (D. 54.)	47.2	SW. by S.	..	..	5	Fleecy clouds and Ci-a.
	20 25	23.2	767.65	30.107	62.8	60.	.492	(D. 54.)	89.5	SW. by S.	..	..	7	Fleecy clouds and Ci-a.
	22 25	22.5	767.80	30.117	62.3	59.3	.478	..	88.2	SW. by S.	..	..	1	Clear, fleecy clouds in S. and SW.

September.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1940.

[97]

118

Date.	Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
			Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
8	a.	0	21.3	767.10	30.095	59.8	58.2	475	3 A. M.: (D. 55.5)	91.9	SW. by S.	..	..	2	A few light Ci-a.
		2	19.2	765.95	30.060	58.8	54.7	392		94.7	SW. by S.	..	..	3	Clear.
		4	25	765.80	30.058	57.	56.1	440		93.8	SW. by S.	..	..	3	N., S.
		6	25	766.70	30.094	59.5	58.2	479	9 A. M.: (D. 60.)	91.9	SW. by S.	..	..	6	Cu., Ci-cu.
		8	25	766.50	30.081	65.4	62.7	542		87.3	SW. by S.	..	..	6	Cl., Ci-cu., Cu s. from SW.
		10	25	766.40	30.069	68.3	63.2	525	(A. 67.3)	84.	SW. by S.	..	..	7	Cl-cu., Cu-s. from SW.
		12	25	765.30	30.016	71.9	64.6	527	3 P. M.: (D. 59.5)	77.5	SSW.	1	..	1	Ci-cu., Cu. from SW.
		14	25	764.35	29.971	74.	64.6	504		72.	SW. by S.	2	..	3	Cl., Cu. from WSW.
		16	25	763.95	29.963	75.	64.5	490	(A. 77.5)	72.2	SW. by S.	1	..	8	Ci-cu., Cu.
		18	25	763.75	29.960	68.4	63.5	533	9 P. M.: (D. 56.)	83.9	SSW.	1	..	6	Ci-a., Ci-cu.
		20	25	763.10	29.937	63.5	61.5	538		90.5	S. by W.	..	..	7	Ci-a., Ci-cu.
		22	25	763.25	29.943	61.6	60.1	508		86.	S. by W.	..	..	6	S., Ci-a.
		24	25	762.65	29.925	61.5	60.	506	3 A. M.: (D. 60.)	90.6	S. by W.	..	..	7	Ci-a.
		2	26	761.65	29.883	63.9	62.8	562		91.7	S. by W.	..	..	7	Cl., Ci-a., Cu.
		4	26	761.75	29.888	64.5	63.3	571		92.1	S. by W.	..	..	8	Heavily overcast.
		6	26	762.00	29.897	66.5	64.5	585	9 A. M.: (D. 64.)	90.	S. by W.	..	..	8	Heavily overcast with fog.
		8	26	762.15	29.901	68.	66.	616		87.	SW.	..	..	8	N. from SW.
		10	26	762.00	29.890	70.3	66.4	603	(D. 69.5)	86.	SW. by W.	1	..	8	Cu., Cu-s., N.
		12	26	761.20	29.857	72.4	68.	632	3 P. M.: (D. 66.)	87.	WSW.	..	..	6	Ci., Ci-cu., Cu-s. from W/SW.
		14	26	760.50	29.815	76.5	69.7	645		79.5	SSW.	1	..	5	Cu., Cl., Ci-cu., S. from W.
		16	26	760.20	29.808	74.8	67.8	600	(A. 75.)	80.7	SW.	..	..	8	N. from SW., raining.
		18	26	760.35	29.819	71.3	68.5	661	9 P. M.: (D. 65.)	98.1	SW. by S.	1	..	8	N. from SW., raining.
		20	26	759.95	29.804	68.3	67.3	653		93.4	S. by W.	..	.08	8	N., ceased raining.
		22	26	759.85	29.800	68.1	66.7	658		93.1	S. by W.	..	.10	8	N.

SEPTEMBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.]

Day.	Hour.	Barometer.				Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Beaumore's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature.	Obs'd height, millimetres.	Corr. height, inches.		Dry.	Wet.				Dir. points.	Pace, lbs.			
10	0	23.7	759.00	29.759		67.1	66.2	.632	8 A. M.: (D. 61.8)	93.4	S. by W.	...	...	7	Cu.; N., Ci-cu. Apparently light N. Overcast lightly.
	2	23.3	758.05	29.734		66.4	65.7	.634		92.7	W. by S.	...	...	8	Overcast.
	4	23.	758.00	29.734		67.4	66.7	.645		93.	W. by S.	...	...	8	
	6	25	758.15	29.741		67.6	66.5	.636	9 A. M.: (D. 63.5)	90.8	W. by S.	...	...	8	
	8	25	758.25	29.743		68.3	66.7	.635	(A. 71.)	90.	W. by S.	...	...	6	[middle from W. Cu., Ci., Ci-cu.; 2 Str., lower from N., Cu., Ci-cu., Cu-a.
	10	25	758.35	29.737		72.3	68.	.634	3 P. M.: (D. 57.5)	86.	NW.	1	...	8	Cu., N. from W.
	12	25	757.40	29.699		75.5	65.7	.624	(A. 73.)	71.5	W. by N.	1	...	8	N. from SW., raining lightly.
	14	25	756.40	29.663		72.2	68.6	.494	9 P. M.: (D. 48.)	78.2	WSW.	1	.07	8	N., ceased raining.
	16	25	756.60	29.676		69.4	61.9	.474		85.1	SW.	...	.03	8	Ci-cu., Ci., Cu., from NW.
	18	25	757.30	29.710		63.6	61.1	.515		88.5	NNW.	...	...	5	Cu., Ci-cu., S., Cu-a.
11	20	25	757.95	29.738		59.7	56.4	.433		87.1	W.	...	...	1	Clear.
	22	25	757.10	29.713		56.5	53.5	.388		86.2	NW.	...	...	...	Clear.
	0	25	757.15	29.717		56.	53.	.356	3 A. M.: (D. 45.)	83.2	NW.	...	...	...	Clear.
	2	25	757.40	29.731		54.	49.7	.333		81.5	NW.	...	...	...	Clear.
	4	25	757.05	29.718		54.	49.5	.318	9 A. M.: (D. 46.)	81.7	NW.	...	...	...	Clear.
	6	25	758.85	29.789		58.	53.5	.346	(A. 59.)	78.5	NW.	...	...	...	Cu. from NW.
	8	25	759.05	29.792		60.7	53.8	.348	3 P. M.: (D. 46.5)	75.5	NW.	...	...	2	Cu., N. from NW.
	10	25	759.15	29.791		64.	55.2	.347		71.5	NNW.	...	...	8	Cu., Ci-cu. from NW.
	12	25	759.15	29.791		63.	54.8	.348	9 P. M.: (D. 48.)	73.	NNW.	...	...	8	N. from NW.
	14	25	759.95	29.824		60.6	54.	.354		77.5	NNW.	...	...	8	N., from NW., raining.
20	16	25	760.80	29.859		57.6	54.	.368		85.7	NNW.	...	...	8	N., Cu., Ci-cu.
	18	25	762.55	29.930		57.1	51.6	.332	(D. 48.)	81.5	NW.	...	...	...	A few Ci., Ci-cu., Cu.
	22	25	763.10	29.955		54.6	48.8	.393		79.	NW.	...	...	1	

* Recorded 68.6.

† Recorded 753.16.

September.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.]

[97]

120

Date.		Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
12	0	16.3	763.55	29.979	51.5	47.	.287	3 A. M.: 81.3	81.3	NW.	1	.	1	Cu., S., Ci.
	2	15.5	763.85	29.994	50.	45.8	.276	(D. 41.) 81.2	81.2	NW.	1	.	1	S., Ci-s.
	4	14.3	764.40	30.022	48.3	44.7	.271	..... 83.2	83.2	NW.	1	.	1	S., Ci-s.
	6	13.8	766.00	30.088	47.2	44.5	.279	9 A. M.: 86.1	86.1	NW. by N.	2	.	2	Cu.
	8	14.6	766.85	30.118	53.8	47.5	.272	(D. 39.5) 77.	77.	N. by W.	2	.	2	Clear, a few Cu. in W., S. in E.
	10	15.4	767.15	30.126	56.8	49.	.273	(A. 68.) 72.	72.	N.	2	.	2	Cu., Ci-cu. from NNE.
	12	16.3	767.30	30.127	60.	50.	.260	3 P. M.: 67.	67.	N. by W.	2	.	2	Cu., Ci-cu. from N.
	14	18.	766.85	30.102	63.3	51.2	.252	(D. 40.5) 62.5	62.5	NNW.	2	.	2	Clear, a few detached Cu. near Hor.
	16	19.4	767.10	30.104	64.5	51.3	.241	(A. 65.) 61.2	61.2	NNW.	1	.	1	Clear.
	18	19.3	768.25	30.151	56.5	48.5	.265	9 P. M.: 87.7	87.7	NNW.	1	.	1	Clear.
	20	17.8	769.25	30.197	52.1	45.	.234	(D. 31.) 72.5	72.5	N.	1	.	1	Clear.
	22	16.8	769.50	30.211	49.5	42.5	.220	..... 70.2	70.2	N.	1	.	1	Clear.
14	0	15.3	769.20	30.206	52.8	49.6	.332	3 A. M.: 86.1	86.1	NNW.	1	.	1	Clear.
	2	16.3	768.95	30.192	50.5	47.7	.313	(D. 44.) 88.2	88.2	NNW.	1	.	1	Clear.
	4	15.7	769.15	30.202	49.2	46.3	.296	..... 87.8	87.8	NNW.	1	.	1	Clear.
	6	15.6	769.65	30.232	48.4	45.5	.287	9 A. M.: 87.7	87.7	NNW.	1	.	1	Clear.
	8	16.3	769.80	30.226	56.8	50.	.296	(D. 41.5) 77.	77.	NNW.	1	.	1	Clear.
	10	17.2	769.25	30.199	63.6	52.	.299	(A. 61.5) 66.5	66.5	NNW.	1	.	1	Clear.
	12	18.7	769.15	30.149	66.2	54.8	.310	..... 67.	67.	NNW.	1	.	1	Clear, a few small detached Cu. near
	14	20.5	767.10	30.098	69.2	57.	.324	..... 66.	66.	NW.	1	.	1	Hor. Ci-cu., Cu. from N.
	16	23.6	766.50	30.086	71.2	57.4	.335	..... 64.	64.	NW.	1	.	1	Scattered Cu.
	18	21.6	766.00	30.052	60.4	54.8	.376	9 P. M.: 76.5	76.5	NNW.	1	.	1	A few Cu. in N.
	20	20.7	766.15	30.081	53.7	51.7	.374	(D. 44.) 90.	90.	NNW.	1	.	1	A few Cu. near E. Hor.
	22	19.3	766.40	30.037	50.8	50.1	.387	..... 92.9	92.9	W. by N.	1	.	1	Clear.

• Recorded 756.00.

SEPTEMBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1946.]

Day.	Date.	Barometer.			Therm'ts, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaumier's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.				Dir. point.	Force, lbs.			
15	h. m.													
	0 25	18.7	764.85	30.020	48.5	49.1	.346	3 A. M.: (D. 49.)	91.8	WSW.	..	..	1	Cl., Ci.-a.
	2 25	16.1	764.45	30.016	51.5	50.	.356		92.3	WSW.	..	..	..	Clear.
	4 25	15.1	763.40	29.979	51.	49.8	.358		92.7	WSW.	..	..	1	Cl., Ci.-a.
	6 25	14.8	763.65	29.991	51.3	*49.9	.358	9 A. M.: (D. 51.5)	92.1	WSW.	..	..	..	Clear.
	8 25	17.	763.80	29.986	64.3	58.6	.436	(A. 67.)	74.	WSW.	..	..	..	Clear, hazy in Hor.
	10 25	18.5	763.70	29.975	70.5	61.	.435	3 P. M.: (A. 76.)	70.	WNW.	1	..	..	Clear, Exc few detached Cu.
	12 25	23.5	763.80	29.955	73.8	63.6	.446	(D. 49.5)	66.	WNW.	1	..	2	Cu., Ci cu. from W.
	14 25	24.5	763.20	29.928	77.	63.8	.416	(A. 76.)	64.1	W.	..	..	4	Cu. from NE.
	16 25	26.	763.35	29.923	77.5	63.5	.401	(D. 52.5)	77.5	W.	..	..	..	Some Cu. in NE.
	18 25	22.1	763.40	29.934	66.8	60.8	.470		90.5	W.	..	..	..	Clear.
	20 25	20.6	763.95	29.966	59.	57.7	.471		91.3	WNW.	..	..	..	Clear.
16	22 25	20.7	763.00	29.974	56.5	55.7	.444		94.7	WNW.	..	..	..	Clear.
	0 25	20.7	764.00	29.976	57.	55.8	.443	3 A. M.: (D. 52.3)	94.1	WNW.	..	..	1	Cl.-a.
	2 25	20.	763.85	29.973	55.	54.1	.419		91.	WNW.	..	..	3	Cl., Ci.-a.
	4 25	19.3	764.15	29.988	54.7	53.9	.417		93.3	WNW.	..	..	7	Ci-cu. S.
	6 25	16.8	764.56	30.017	53.6	53.8	.402	9 A. M.: (D. 53.5)	85.	NNE.	..	..	4	Ci-cu. S.
	8 25	19.	765.30	30.035	62.5	59.	.467	(A. 67.)	78.5	ENE.	..	..	2	Mottled Ci-cu., S.
	10 25	20.5	765.50	30.035	68.2	62.3	.499	3 P. M.: (D. 58.)	67.	SSW.	..	..	5	Ci., Cu.
	12 25	22.5	765.30	30.018	75.	64.2	.504	(A. 76.)	67.5	SW.	1	..	5	Cu. from SE.
	14 25	24.7	764.60	29.981	75.1	65.	.504		67.	SW.	1	..	3	Cu., Ci cu.
	16 25	26.5	764.60	29.971	77.5	68.4	.523	9 P. M.: (D. 52.)	70.	E.	..	..	..	Cu. in N. and NE.
	18 25	24.5	764.85	29.992	68.5	59.9	.425		85.4	S.	..	..	..	Clear.
	20 25	23.9	765.50	30.019	61.5	57.9	.448		85.2	S.	..	..	..	Clear.
22	22 25	22.8	765.25	30.015	56.5	54.7	.418							

* Recorded 41.9.

September.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

Day.	Hour.	Barometer.			Therm'ns, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Centigrade.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
19	0	17.3	758.65	29.782	55.	53.7	384	3 A. M.: (D. 48.7)	92.3	NW.	..	..	8	Overcast, N.
	2	16.7	758.05	29.761	50.1	49.9	370		93.	NW.	..	..	1	Clear, a little Cu-s.
	4	16.1	758.00	29.762	48.5	48.	343		92.7	NW.	..	..	..	Clear.
	6	15.6	758.60	29.784	47.8	46.5	317	9 A. M.: (D. 42.5)	90.2	NW.	..	..	..	Clear.
	8	15.	759.10	29.805	54.3	50.	325		81.	WNW.	1	..	..	Clear.
	10	16.6	758.85	29.781	58.5	51.1	305	(A. 56.5)	78.5	WNW.	..	..	2	Cu., Ci-cn. from N.W.
	12	17.8	758.30	29.766	61.4	52.7	312	3 P. M.: (D. 44.5)	70.	WNW.	1	..	5	Cu., Ci-cn. from WNW.
	14	19.4	757.85	29.741	63.5	54.5	334	(A. 63.)	69.5	WNW.	1	..	6	Cu., Cu-s, Ci., Ci-cn. from WNW.
	16	25	757.90	29.741	63.2	54.3	333	9 P. M.: (D. 45.)	70.	WNW.	1	..	3	Cu., N., Ci-s. from W.
	18	25	757.90	29.748	63.5	51.	358		85.1	W.	..	..	..	N., Ci-s.
21	0	18.3	758.40	29.767	49.5	48.5	344		91.2	W.	..	..	..	Clear.
	2	17.5	757.90	29.752	48.7	47.3	322		89.	W.	..	..	1	Clear, Exc. Ci-s. in N. and W.
	4	16.7	753.70	29.584	57.9	53.2	363	3 A. M.: (D. 45.)	83.4	NW.	..	..	..	Light N. scattered over sky.
	6	15.5	755.65	29.669	52.2	47.3	382		85.	NW.	..	..	..	Clear.
	8	15.2	759.00	29.805	50.7	43.7	223	9 A. M.: (D. 34.)	82.7	WNW.	..	..	..	Clear.
	10	15.6	759.65	29.829	53.5	45.	219	(A. 53.)	76.	NW.	2	..	..	A few Cu. near Hor.
	12	15.8	760.00	29.842	55.	46.5	236	3 P. M.: (D. 49.7)	71.	NW.	3	..	1	Cu. around Hor.
	14	16.2	760.55	29.863	57.2	47.7	239		68.5	NW.	2	..	3	Cu., Ci-cn. Cu-s.
	16	18.9	761.85	29.900	56.4	46.	209	(A. 56.5)	67.6	NW.	2	..	3	Cu., Ci-cn. Cu-s. from NW.
	18	25	763.10	29.953	48.6	43.1	232	9 P. M.: (D. 28.5)	75.1	NNW.	..	..	1	Few thin Ci-s. near Hor.
23	0	16.4	765.00	30.036	45.5	40.7	217		78.3	N.	..	..	..	Dark Cu. in N., faint aurora.
	2	15.2	766.24	30.091	40.3	37.1	203		78.5	N.	..	..	..	Clear, aurora disappeared.

* Recorded 768.05.

† Recorded 68.5.

September.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

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Day.	Hour.	Barometer.			Therm'rs, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
22	0 25	13.9	766.85	30.122	39.6	37.2	.213	3 A. M.: (D. 31.5)	85.9	N.				Clear.
	2 25	13.	767.45	30.149	37.9	36.6	.218		92.1	N.				Clear.
	4 25	12.1	768.30	30.187	34.7	33.9	.204		95.1	N. by W.				Clear.
	6 25	12.1	769.90	30.250	34.4	33.5	.200		93.3	N. by W.			1	S., Cl.
	8 25	12.	770.30	30.285	44.	37.8	.174		71.5	NNW.				Clear, Exc. little S. in S.
	10 25	12.	770.40	30.269	48.3	41.3	.197		69.6	NNW.				Clear, Exc. little S. in S.
	12 25	13.	768.85	30.205	52.2	44.	.211		67.	WNW.				Clear, Exc. little S. in S.
	14 25	14.5	769.25	30.212	55.7	46.3	.222		64.	NW.				Clear.
	16 25	17.5	769.35	30.201	58.3	47.5	.220		62.6	NW.				Clear.
	18 25	16.4	769.25	30.203	46.3	43.1	.258	9 P. M.: (D. 34.)	79.1	NW.				S., Cu., Ca.-s. around Hor.
23	0 25	15.9	769.45	30.213	42.1	41.3	.268		90.9	NW.				Clear.
	2 25	15.5	769.35	30.211	38.5	38.5	.251		93.8	WNW.				Clear.
	4 25	13.2	769.00	30.208	42.	41.	.263	3 A. M.: (D. 40.7)	90.6	WNW.				Clear.
	6 25	12.1	768.70	30.197	41.5	40.	.248		94.8	WNW.				Clear.
	8 25	11.8	768.50	30.195	38.9	38.4	.244		94.3	WNW.				Clear.
	10 25	12.5	769.00	30.212	51.5	47.5	.298	9 A. M.: (D. 39.3)	81.	WNW.			4	Thin S. around Hor. S.
	12 25	14.	768.40	30.182	62.	51.6	.277	(A. 58.)	67.	WNW.				Thin S. around Hor. S.
	14 25	16.2	767.75	30.145	61.	54.5	.328	3 P. M.: (D. 43.5)	67.	W.				Heavy, no clouds.
	16 25	18.	767.00	30.107	69.	55.	.324	(A. 68.)	61.5	W.				Clear.
	18 25	20.	767.20	30.104	69.	56.4	.322	(A. 68.)	61.5	W.				Clear.
	20 25	19.6	768.00	30.139	53.5	49.9	.331	9 P. M.: (D. 43.)	74.1	W.				Clear.
	22 25	19.4	768.05	30.141	47.5	46.9	.339		84.	W.				Clear.
	23 25								93.	W.				Clear.

SEPTEMBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

Day.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hyg., Centigrade.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
24	A. M.													
	0	18.5	768.50	30.164	52.	48.7	.320	3 A. M.: 38.2	86.2	NNW.	..	..	..	Clear.
	2	17.8	768.60	30.171	51.	48.3	.322	(D. 38.)	88.9	NNW.	..	..	..	Clear.
	4	16.8	769.05	30.193	48.5	47.	.320	..	92.8	NNW.	..	..	..	Clear.
	6	16.3	770.25	30.242	48.1	46.7	.317	..	92.9	NNW.	..	..	..	Clear.
	8	17.5	771.00	30.265	57.7	54.6	.403	..	82.	NE.	1	..	..	No clouds, hazy.
	10	18.	771.50	30.282	63.	57.	.405	..	79.5	ENE.	1	..	..	No clouds, hazy.
	12	19.5	771.10	30.260	65.5	58.	.404	3 P. M.: 37.6	76.	ENE.	..	..	..	A very few detached Cu. in Hor.
	14	21.8	770.60	30.229	69.	60.	.431	(D. 50.)	72.	E.	..	..	..	Clear, Exc. detached Cu.
	16	23.8	770.80	30.233	70.	59.6	.405	(A. 69.)	72.	NE. by E.	..	..	4	Detached Cu., Ci-cu. in Hor.
	18	19.7	770.60	30.240	60.	55.3	.391	9 P. M.: 37.1	80.	ESE.	1	..	..	Very hazy.
	20	20.5	771.40	30.266	54.8	52.5	.381	(D. 47.)	87.1	SE. by S.	..	..	..	Clear.
25	22	19.5	771.35	30.270	49.5	48.9	.353	..	94.8	SE. by S.	..	..	..	Clear.
	23	16.3	771.10	30.275	49.1	48.5	.348	3 A. M.: 38.4	93.4	SE. by S.	..	..	..	Clear.
	2	17.2	770.90	30.263	47.6	47.	.330	(D. 45.4)	94.1	SE. by S.	..	..	..	Clear.
	4	16.5	770.95	30.270	46.5	46.	.320	..	93.7	ESE.	..	..	..	Clear.
	6	15.3	771.20	30.285	44.7	44.4	.305	9 A. M.: 38.5	93.5	ESE.	..	..	1	Cu., Ci-cu.
	8	16.4	771.60	30.295	55.	53.6	.406	(D. 53.5)	87.	ENE.	..	..	..	Very hazy, no clouds.
	10	17.5	771.40	30.281	61.8	56.8	.413	(A. 62.)	81.	E.	..	..	1	Very hazy, Cu., Ci-cu.
	12	20.2	770.80	30.246	67.7	61.	.463	3 P. M.: 37.6	76.5	SE.	..	..	5	Ci-cu., Cu. from W.
	14	21.6	769.75	30.197	67.	59.8	.439	(D. 51.5)	74.	SE.	..	..	3	Ci-cu., Cu., hazy.
	16	21.4	769.40	30.185	68.	59.5	.419	(A. 69.)	72.5	ESE.	1	..	3	Ci-cu., Cu. from W., hazy.
	18	17.3	769.20	30.196	58.9	54.2	.378	9 P. M.: 38.5	83.5	SE.	1	..	3	Cu., Cu-s, S. from SW.
	20	20.	770.15	30.230	54.	51.5	.365	(D. 43.)	89.	SSE.	..	..	..	Clear.
	22	19.3	770.50	30.238	51.1	49.5	.349	..	90.	SSE.	Clear.

September.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

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Day.	Hour.	Thermom. Fah.			Barometer.		Force of vapor, in.		Dew point, Fah.	Hygr., Beaumore's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.					Dir. points.	Force, lbs.			
26	A. m.														
	0 25	17.4	769.45	30.206	47.6	47.2	.335	3 A. M.: (D. 39.5)	93.4	S. by E.					Clear.
	2 25	16.4	768.80	30.186	46.6	46.4	.328	S. by E.	93.2	S. by E.					Clear.
	4 25	15.8	768.65	30.182	44.	43.6	.296	9 A. M.: (A. 62.)	93.9	SSE.					Sky very dark.
	6 25	15.	768.90	30.196	42.9	42.7	.288	(A. 62.)	92.9	ESE.					A little misty.
	8 25	15.7	769.00	30.196	53.2	52.2	.391	3 P. M.: (D. 48.)	91.	ESE.					A little misty.
	10 25	16.8	768.65	30.178	58.7	55.2	.406	9 P. M.: (D. 46.5)	82.	SW.					Very hazy, no clouds.
	12 25	18.3	767.65	30.130	63.8	56.6	.391	(A. 69.)	76.	SW. by S.					Ci-ca., Cu. still hazy.
	14 25	20.7	767.00	30.094	68.5	57.9	.368	9 P. M.: (D. 42.5)	70.2	SSW.					Ci-ca. in NW. and W., still hazy.
	16 25	21.7	766.35	30.064	69.8	58.9	.381		69.9	SW.					Cu., Ci-ca. in Hor.
	18 25	19.7	766.30	30.072	58.2	55.	.406		86.7	SSW.					Hazy, Cu. in E.
	20 25	18.1	766.30	30.080	53.9	52.9	.401		90.	S.					Clear.
28	22 25	16.4	766.10	30.080	50.2	50.2	.378	3 A. M.: (D. 41.)	91.2	S.					Clear.
	0 25	16.3	763.60	29.989	49.5	48.5	.344	9 A. M.: (A. 58.)	92.9	NW.					Clear.
	2 25	15.4	764.00	30.002	47.5	46.5	.320	3 P. M.: (A. 61.5)	91.8	NW.					Clear.
	4 25	14.7	764.60	30.029	47.8	46.	.306	9 P. M.: (D. 43.)	89.9	NW.					Clear.
	6 25	13.9	765.30	30.060	47.5	45.6	.300	9 A. M.: (A. 58.)	88.3	NW.					Very lightly overcast.
	8 25	13.6	766.25	30.099	53.	49.4	.326	3 P. M.: (A. 61.5)	85.	NW.					Ci., Ci-s.
	10 25	15.	766.35	30.098	58.	50.5	.295	9 P. M.: (D. 43.)	75.	N.					Cu., Cu-s. in NW, Ci. from N.
	12 25	16.4	766.20	30.084	60.	51.4	.295	9 P. M.: (D. 42.5)	69.	NNW.					Cu., Cu-s., Ci-ca.
	14 25	18.2	765.65	30.052	63.3	52.7	.289		66.7	NNW.					Ci s. along W. Hor.
	16 25	18.6	765.95	30.068	63.	58.	.301		66.5	N.					S.
	18 25	18.3	766.60	30.098	53.3	49.	.313		81.6	N.					Ci s., S., Cu., hazy.
	20 25	17.5	766.95	30.108	49.6	47.5	.318		86.	N.					Slightly hazy, no clouds.
	22 25	17.	767.00	30.112	47.6	45.7	.301		86.	N.					Clear.

DAILY METEOROLOGICAL OBSERVATIONS

[1940.

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Centimeter's	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
29	A. m.													
	0 25	16.3	767.30	30.123	48.5	46.	.298	3 A. M.: (D. 43.5)	87.8	N.	..	..	..	Clear.
	2 25	15.7	767.15	30.123	46.	44.5	.292		91.8	N.	..	..	..	Clear.
	4 25	14.7	767.30	30.131	44.8	43.5	.284		93.7	N.	..	..	..	Clear.
	6 25	14.7	768.30	30.170	45.5	43.9	.285	9 A. M.: (D. 44.5)	91.8	N.	..	..	7	Very slightly overcast:
	8 25	15.6	768.65	30.183	53.	49.7	.333		87.	N.	..	..	..	Clear.
	10 25	17.	768.30	30.163	59.5	53.	.341	(A. 56.5)	75.5	WNW.	..	..	..	Very light Ci.
	12 25	18.8	767.60	30.127	65.	55.5	.343	3 P. M.: (D. 50.5)	70.5	W.	..	..	..	Ci.
	14 25	19.8	766.80	30.091	65.5	58.	.404		74.	S. by W.	..	..	..	Ci. s.
	16 25	20.3	766.75	30.086	66.5	57.9	.402	(A. 68.)	75.	S. by W.	..	..	..	Ci., Ci-cu.
	18 25	18.7	766.75	30.085	57.9	53.2	.363	9 P. M.: (D. 48.)	82.9	S. by W.	..	..	..	Hazy, Ci-cu.
30	20 25	18.9	766.35	30.077	54.2	51.3	.357		91.1	S. by W.	..	..	..	Clear.
	22 25	17.6	766.25	30.080	50.	48.6	.340		92.5	S. by W.	..	..	..	Clear.
	0 25	15.6	765.70	30.082	50.5	50.	.367	3 A. M.: (D. 49.7)	94.3	S. by W.	..	..	..	Clear.
	2 25	16.4	765.35	30.050	48.9	48.1	.341		94.	S. by W.	..	..	..	Very dense fog.
	4 25	16.5	765.30	30.048	47.7	47.5	.341		93.2	S. by W.	..	..	..	Very dark, sky not visible.
	6 25	16.5	765.30	30.044	48.8	48.5	.352	9 A. M.: (D. 51.5)	92.7	S. by W.	..	..	..	Thick fog, Cu., Ci-cu., Ci.
	8 25	17.	765.10	30.037	56.3	55.8	.427	(A. 63.)	88.	S. by W.	1	..	..	S., Ci. s., Ci-cu. from W.
	10 25	18.3	765.00	30.036	63.	58.8	.456		84.	Ci., Ci-cu., Ci-s., Cu-s.	..	..	..	Ci., Ci-cu., Ci-s., Cu-s.
	12 25	20.7	764.20	29.984	65.7	61.	.488	3 P. M.: (D. 56.)	80.	S. by W.	..	..	..	Ci., Ci-s., Cu s., N?
	14 25	21.	763.40	29.960	67.	61.7	.495		81.	S. by W.	1	..	..	Ci., S., Ci-s., Cu-s.
	16 25	21.3	763.30	29.945	68.3	62.5	.504	(A. 69.5)	80.5	S. by W.	..	..	..	Ci., S., with Ci-cu.
20 25	18 25	20.6	763.45	29.954	65.6	61.7	.510	9 P. M.: (D. 56.3)	84.	S. by W.	..	..	..	N., Ci., Ci cu.
	20 25	20.	763.30	29.951	64.5	61.9	.528		90.	S. by W.	..	..	..	N., raining slightly.
22 25	19.5		763.80	29.974	63.9	61.5	.523		91.5	S. by W.	..	.05	..	N., raining slightly.

Octozaa.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

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Day.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew-point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperat.	Ord' height.	Corr. height.	Dry.	Wet.				Dir. points.	Force, lbs.			
1	A. m.													
	0 25	20.6	763.65	29.962	60.9	60.	.513	3 A. M.: 513	92.9	S.	..	..	7	Dense N.
	2 25	20.5	763.50	29.957	60.	59.2	.500	(D. 61.2)	92.5	S.	..	..	1	N.
	4 25	20.1	763.95	29.977	59.5	59.	.500	.....	93.	S.	..	..	1	N.
	6 25	19.9	764.25	29.990	58.6	59.4	.511	9 A. M.: 511	92.9	S. by W.	..	..	7	Cu., Ci-cu., N., Ci.
	8 25	20.	764.75	30.009	65.5	63.	.550	(D. 63.)	90.5	S. by W.	..	..	7	Ci., Ci-cu., Ci-a., Cu a.
	10 25	21.	765.60	30.039	67.5	64.	.558	(A. 67.5)	90.5	SW.	..	..	8	N., raining.
	12 25	22.1	765.20	30.016	70.	68.4	.606	3 P. M.: 606	87.	S. by W.	..	..	8	Ci-cu., N.
	14 25	23.	764.80	29.997	71.9	67.4	.618	(D. 63.)	84.5	S. by W.	..	..	7	Cu., Ci., Ci cu.
	16 25	24.7	765.60	30.019	74.3	69.	.645	(A. 75.5)	85.1	S.	..	..	7	Cu., Ci. from W.
	18 25	23.2	766.00	30.042	68.5	66.5	.628	9 P. M.: 628	87.	ESE.	..	..	8	Cu., Ci-a., Ci-cu., N.
	20 25	22.5	766.85	30.080	65.5	63.9	.561	(D. 61.)	91.	ENE.	..	..	8	Overcast.
	22 25	21.7	767.50	30.109	63.1	62.5	.561	.....	90.	ENE.	1	..	8	Overcast.
	0 25	21.1	768.85	30.087	61.5	61.2	.541	3 A. M.: 541	94.	ENE.	..	..	8	N.
	2 25	21.3	768.70	30.090	61.5	61.	.535	(D. 61.)	91.	ENE.	..	..	8	N., raining gently.
	4 25	20.9	766.90	30.090	61.	60.7	.533	.....	92.3	ENE.	..	..	8	N., raining gently.
2	6 25	20.7	767.15	30.100	61.1	60.8	.534	9 A. M.: 534	93.6	ENE.	1	..	8	Thick fog.
	8 25	20.	767.35	30.111	64.6	62.	.530	(D. 60.)	90.	E. by N.	..	..	8	Thick fog.
	10 25	20.5	767.25	30.105	64.5	63.8	.585	(A. 64.5)	92.	E.	..	.15	8	N., raining.
	12 25	20.3	766.65	30.082	65.6	64.4	.592	3 P. M.: 592	91.5	E.	..	..	8	N., raining.
	14 25	20.5	766.00	30.056	66.6	64.2	.674	(D. 61.5)	89.5	E.	..	..	8	N.
	16 25	20.7	765.50	30.030	66.	65.	.608	(A. 74.)	91.9	E.	..	..	8	N.
	18 25	20.2	764.90	30.014	66.5	65.8	.628	9 P. M.: 628	94.	ESE.	..	..	8	N., raining gently.
	20 25	20.7	764.35	29.989	66.4	66.	.634	(D. 63.)	94.1	ESE.	..	..	8	N.
	22 25	21.2	763.70	29.961	66.8	66.2	.635	.....	94.8	SE. by S.	..	..	8	N.

October.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.]

Day.	Hour.	Barometer.				Thermom. Fah.		Force of vapor, lbs.	Dew point, Fah.	Hygr., Beauméré's.	Wind.		Rain, inches.	Sky covered, eths.	Clouds, &c.
		Temperature, centigrade.	Old height, millimetres.	Corr. height, inches.		Day.	Night.				Dir. point.	Force, lbs.			
3	0	21.	762.85	29.929		65.8	65.	.608	3 A. M.:	94.2	S.	1	..	3	N.
	2	21.	762.00	29.895		65.8	65.	.608	(D. 62.3)	93.2	S. by W.	1	..	..	Clear.
	4	21.	761.60	29.880		65.9	64.5	.591	..	92.1	S. by W.	1	..	7	Dense N.
	6	21.	761.30	29.869		65.1	63.6	.571	9 A. M.:	93.1	S. by W.	1	..	8	Cl., Cl.-cu., Cu., N.
	8	21.	761.00	29.858		69.5	65.5	.584	(D. 62.)	86.6	SSW.	4	..	8	N., Cu., Cu.-s. from SW.
	10	21.	761.00	29.855		67.	66.	.587	(A. 69.5)	93.	SW. by S.	1	.26	8	N., raining hard.
	12	21.	763.70	29.925		56.1	55.2	.435	3 P. M.:	91.	NW.	1	.18	8	N., raining.
	14	21.	763.85	29.937		57.	50.8	.315	(D. 43.5)	77.	NW.	..	..	8	N. in E., Cu., Cu.-s. in NW.
	16	21.	763.35	29.904		59.1	50.9	.298	(A. 59.)	71.6	NW.	..	..	6	N. in S., Cu., Cl.-cu., S.
	18	21.	764.55	30.011		58.5	47.	.266	9 P. M.:	73.9	NW.	..	..	6	N., Cl., Cu., Cl.-cu., S.
5	20	25	766.00	30.070		52.	43.6	.206	(D. 27.)	69.	NW.	..	..	7	Cl., Cu., Cl.-cu.
	22	25	767.00	30.115		49.6	41.4	.186	..	66.1	NW.	..	..	..	Few Cl., clear.
	0	25	766.60	30.106		47.5	44.5	.275	3 A. M.:	84.4	?	..	..	..
	2	25	766.25	30.094		45.5	43.8	.285	(D. 40.)	89.2	..	..	..	..
	4	25	766.15	30.094		42.	41.4	.271	..	94.2	..	..	..	..
	6	25	766.60	30.115		41.3	40.7	.265	9 A. M.:	93.5	..	..	..	..
	8	25	766.70	30.117		51.	49.5	.350	(D. 45.5)	89.6	..	..	..	..
	10	25	766.40	30.100		57.6	51.6	.326	(A. 56.)	75.5	SW.	1	..	..
	12	25	765.25	30.047		62.	53.8	.332	3 P. M.:	68.5	WSW.	1	..	..
	14	25	764.60	30.015		68.	56.5	.335	(D. 48.)	65.	SW.	..	..	..	Clear all day.
17	16	25	764.25	29.981		66.4	57.5	.290	(A. 66.)	71.8	SW.	..	..	..
	18	25	764.20	29.997		61.	55.	.374	9 P. M.:	78.5	SW.	..	..	..
	20	25	764.70	30.014		54.5	51.9	.369	(D. 46.)	88.4	SW.	..	..	..
	22	25	764.35	30.005		52.4	51.1	.373	..	87.9	SW.	

Octobrr.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.]

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Day.	Date.	Barometer.			Therm'm Fath.		Force of vapor, ins.	Dew point, Fah.	Hygr., Beaumore's.	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
		Temperat're,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
6	h. m.													
	0 25	17.	764.15	30.000	50.2	45.6	.387	3 A. M.:	92.8	SW.	.	.	.	Clear.
	2 25	16.6	768.65	29.981	47.5	47.	.331	(D. 45.7)	94.	SW.	.	.	.	Clear.
	4 25	15.7	768.30	29.972	45.2	44.9	.310		94.1	SW.	.	.	.	Clear.
	6 25	14.8	768.60	29.989	44.4	43.9	.297	9 A. M.:	94.	SW.	.	.	.	Thick fog.
	8 25	15.5	764.50	30.020	53.5	52.6	.396	(D. 51.5)	92.	SW.	.	.	.	Hazy, no clouds.
	10 25	16.	764.25	30.008	60.	56.6	.439	(A. 58.)	85.	SW.	.	.	.	Hazy, no clouds.
	12 25	18.	763.40	29.965	65.5	60.	.461	3 P. M.:	77.5	SW.	.	.	.	Hazy, no clouds.
	14 25	20.	763.85	29.973	68.5	61.	.457	(D. 56.)	70.	SW.	.	.	.	Clear.
	16 25	22.4	763.15	29.933	71.5	62.5	.467	(A. 68.5)	69.4	SW.	.	.	.	Clear.
	18 25	21.5	763.40	29.949	66.	58.5	.414	9 P. M.:	73.6	SW.	.	.	.	Cu. in NW.
7	20 25	20.6	764.00	29.976	60.	57.	.439	(D. 49.5)	88.9	SW.	.	.	.	Ci-cu., Cu., Ci s. in S.
	22 25	19.5	764.10	29.986	59.	56.	.436		90.2	SW.	.	.	.	Ci-cu., Ci s.
	0 25	15.5	764.25	30.010	54.9	54.	.418	3 A. M.:	92.9	WSW.	.	.	.	S.
	2 25	18.6	763.95	29.985	53.	52.1	.391	(D. 47.)	92.8	WNW.	.	.	.	Clear.
	4 25	17.8	764.90	30.036	53.	51.	.384		88.7	NNW.	.	.	.	Clear.
	6 25	17.	765.75	30.063	53.	50.	.351	9 A. M.:	90.	N.	.	.	.	Ci., S.
	8 25	17.8	767.10	30.112	62.	56.	.391	(D. 50.)	77.5	NE. by N.	.	.	.	Hazy, no clouds.
	10 25	19.	767.75	30.132	65.5	57.	.378	(A. 63.)	75.	E. by N.	.	.	.	Hazy.
	12 25	21.	767.20	30.100	68.	59.8	.438	3 P. M.:	71.	E.	.	.	.	Hazy.
	14 25	22.4	766.65	30.072	70.5	60.8	.428	(D. 53.5)	69.	E.	.	.	.	Clear.
	16 25	23.	766.65	30.070	70.5	60.4	.399	(A. 74.)	67.	SE.	.	.	.	Clear.
8	18 25	20.8	766.90	30.090	61.9	55.4	.375	9 P. M.:	72.	SE.	.	.	.	Small Cu-s., cloud in W.
	20 25	20.5	767.55	30.116	57.1	51.5	.350	(D. 44.)	77.9	SE.	.	.	.	Clear.
	22 25	19.4	767.55	30.122	54.8	50.3	.333		79.9	ESE.	.	.	.	Clear.

6th. 01

OCTOBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.]

Day.	Hour.	Date.	Barometer.			Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, Sols.	Clouds, &c.
			Temp., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
8	0	25	18.8	767.60	30.128	52.5	51.	.369	3 A. M.: (D. 49.5)	92.7	ESE.	...	...	3	Cl., Cl-a.
	2	25	17.7	767.65	30.136	53.7	53.	.406		92.7	E.	...	...	3	Cl., Cl-a.
	4	25	18.	768.50	30.157	55.9	54.4	.417		90.8	E.	...	...	3	N.
	6	25	17.8	768.80	30.180	56.	54.3	.413	9 A. M.: (D. 52.)	85.8	E. by N.	...	...	3	N.
	8	25	17.6	769.30	30.200	59.8	55.4	.398		83.	E. by N.	...	...	7	Cl-cu., Cu-a.
	10	25	18.5	769.00	30.188	62.	56.7	.409	(A. 61.5)	80.	E. by N.	...	...	1	Cl., Cl-cu., Cl-a.
	12	25	19.7	768.50	30.159	65.3	58.8	.430	3 P. M.: (D. 52.5)	77.	E.	...	...	4	S. in SE.
	14	25	21.8	768.00	30.128	69.	61.5	.465		74.1	E. by N.	...	...	4	Hazy, some S. and Cu.
	16	25	22.1	767.80	30.119	69.	61.	.451	(A. 69.5)	74.1	E. by N.	...	...	4	Cl., Cl-a., Cu.
	18	25	19.5	767.80	30.133	59.3	55.8	.419	9 P. M.: (D. 52.)	84.2	ENE.	...	...	4	Cl., Cl-a., Cu.
	20	25	20.7	768.35	30.148	57.1	55.6	.434		90.1	SE. by S.	...	...	4	Cl., Cl-a., Cu.
	22	25	18.9	768.25	30.152	52.	52.	.400		88.7	SSE.	...	...	4	Clear.
	0	26	18.5	767.75	30.134	52.	52.	.400	3 A. M.: (D. 51.7)	88.7	S. by E.	...	...	4	Very heavy.
	2	26	17.9	767.45	30.126	53.5	53.5	.431		93.8	ENE.	...	...	4	Very heavy.
	4	26	18.8	767.75	30.133	65.1	55.	.441		98.2	NNW.	...	...	4	Thick fog.
	6	26	19.5	767.90	30.135	55.4	55.1	.441	9 A. M.: (D. 54.5)	93.	NW. by N.	...	...	4	Thick fog.
9	8	26	17.8	768.25	30.159	57.	56.3	.438		93.	NW. by N.	...	...	1	Thick fog.
	10	26	19.	768.25	30.152	63.7	61.	.511	(A. 58.)	85.	NW.	...	...	1	Cl., Cl-cu., Cl-a. from W.
	12	26	21.3	767.45	30.109	68.8	64.	.543	3 P. M.: (D. 60.)	81.	SSW.	...	...	3	Cl-cu., Cu-a., S. from W.
	14	26	22.8	767.10	30.088	70.5	63.5	.509		77.5	SSW.	...	...	6	Ditto, with Cl.
	16	26	20.2	767.00	30.096	71.4	64.5	.539	(A. 72.)	77.5	SSW.	...	...	6	Ditto, with Cl.
	18	26	16.4	767.60	30.139	69.8	63.7	.492	9 P. M.: (D. 54.5)	78.1	ENE.	...	...	8	N., Cl-cu., Cu. from E.
	20	26	16.3	768.65	30.181	62.6	60.	.494		79.3	ENE.	...	...	8	Ditto, with Cl. and S.
	22	26	16.3	768.75	30.186	61.5	58.5	.464		79.5	NE.	8	Ditto, with Cl. and S.

October.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1940,

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Day.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, Sths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
10	A. M.													
	0 25	20.7	769.00	30.173	58.	56.7	.454	3 A. M.: (D. 54.)	92.5	NE.		.05	8	Cu., N., gentle rain.
	2 25	20.4	769.20	30.183	56.	54.	.417		92.	NE.		.01	8	N., Cu., rain.
	4 25	19.9	769.60	30.201	52.4	51.4	.381		91.8	NE. by E.			8	N., Cu., rain.
	6 45	20.1	770.20	30.223	51.3	49.7	.353	9 A. M.: (D. 49.)	87.5	NE. by E.	1		7	N., Ci-cu.
	8 25	20.	771.00	30.256	52.	50.	.350	(A. 52.5)	88.	NE. by E.			8	N., Ci-cu. from E.
	10 25	17.	770.30	30.242	57.5	51.8	.333	3 P. M.: (A. 57.)	82.5	ENE.	1	.02	8	N., Cu., Ci-cu., rain.
	12 25	16.4	769.30	30.206	55.5	51.3	.343	(D. 48.5)	84.5	ENE.			8	N., Cu., Ci-cu., rain.
	14 25	17.5	768.80	30.181	53.3	50.	.336	(A. 57.)	81.	ENE.			8	N., Cu-a., Ci-cu. from E.
	16 25	17.9	768.40	30.163	51.5	49.5	.344	9 P. M.: (D. 47.)	90.	NE. by E.			8	N., Ci cu.
	18 25	17.8	767.75	30.138	51.	49.5	.350		93.1	NE. by E.			8	N., Ci-a., Ci-cu.
	20 25	17.2	767.10	30.114	51.5	50.5	.369		93.9	ENE.		.03	8	N., Ci-a., Ci-cu., raining.
12	22 25	20.7	766.50	30.091	51.5	50.6	.371		92.9	E. by N.		.01	8	N., Ci-a., Ci-cu. from W
	0 25	20.7	762.80	29.538	62.	60.	.501	3 A. M.: (D. 58.5)	92.9	W.			1	Ci., Ci-cu. from NW.
	2 25	19.7	751.95	29.609	59.7	56.7	.490		91.1	NNW.			4	Cu., Ci., Ci-cu. from NW.
	4 25	19.9	752.35	29.523	61.4	59.	.480		81.3	NNW.			7	Cu., N., Ci., Ci-cu.
	6 25	20.7	753.60	29.545	62.8	57.5	.433	9 A. M.: (D. 46.5)	76.5	NNW.	1		5	Cu., Ci-cu., Cu-a. from W.
	8 25	20.7	753.60	29.569	65.	57.8	.407	(A. 65.)	71.	NNW.	2		3	Cu., Ci-cu. from W.
	10 25	20.7	753.50	29.565	65.5	56.3	.361	3 P. M.: (D. 40.)	68.	NNW.	2		7	Cu., Ci-cu. from W.
	12 25	21.	753.65	29.570	67.	56.	.337	(A. 63.)	66.8	NW.	3		3	Cu., Ci-cu. from NW.
	14 25	21.	754.00	29.594	65.6	53.4	.385	9 P. M.: (D. 36.)	77.7	NNW.	2		4	N., Cu., Ci-cu. from NNW.
	16 25	18.	755.30	29.647	62.2	50.5	.350		71.7	N. by E.	1		8	Light Ci-a. in S. Hor.
	18 25	19.7	757.50	29.726	56.7	48.7	.268		77.7	N. by E.				Ci-a. in W. Hor.
	20 25	18.8	759.00	29.789	50.8	45.2	.254		78.7	N. by E.				
	22 25	17.2	759.75	29.825	47.5	43.4	.252							

1920.

DAILY METEOROLOGICAL OBSERVATIONS.

October.]

Date.	Hour.	Barometer.			Therm'm, Fnh.		Force of vapor, ins.	Dew point, Fnh.	Hygr., percentage.	Wind.		Rain, inches.	Sky covered, eigh.	Clouds, &c.
		Temperature, centigrade.	Old height, millimetres.	Cor. height, inches.	Dry.	Wet.				Dir. point.	Force, lbs.			
13	A. m.													
	0 25	16.3	760.40	29.856	43.8	41.3	.260	3 A. M.: (D. 37.)	89.7	N. by E.	...	...	6	Cl-cu., Cu., Ci. from NW.
	2 25	16.6	760.65	29.864	41.5	40.	.247		91.7	N. by E.	...	...	...	Clear.
	4 25	15.2	761.95	29.922	40.4	39.2	.244	9 A. M.: (D. 32.5)	93.2	N. by E.	...	...	2	Cu., Ci., Ci-a.
	6 25	15.5	763.55	29.943	39.2	38.	.233	(A. 49.)	92.8	N. by E.	...	...	...	Clear.
	8 25	13.5	763.90	29.970	48.	43.	.215	3 P. M.: (D. 40.)	75.	N. by E.	...	...	...	Clear.
	10 25	14.7	763.60	29.950	50.8	43.8	.238	3 P. M.: (D. 41.)	73.	NNW.	...	...	...	Clear.
	12 25	15.6	761.80	29.914	55.2	48.2	.273		71.	W.	...	...	...	Clear, Exc. some Ci-a. in S.
	14 25	17.	761.55	29.898	59.5	51.5	.303	(A. 59.5)	69.8	S.	...	...	...	A little Ci-a. in SW.
	16 25	18.3	761.55	29.891	60.	51.2	.290	9 P. M.: (D. 41.)	68.8	SW.	...	...	...	A little Ci-a. in SW.
	18 25	18.5	761.90	29.904	52.7	48.5	.308		83.	SW.	...	...	...	Ci-a. around Hor.
	20 25	18.2	763.30	29.923	49.	46.4	.301		87.3	SW.	...	...	...	Ci-a. in E.
	22 25	17.	761.55	29.898	46.5	44.6	.289		89.4	SW.	...	...	1	Ci-a.
14	0 25	15.2	760.95	29.883	45.	43.9	.291	3 A. M.: (D. 40.)	88.1	SW.	...	...	...	Clear.
	2 25	15.6	760.90	29.875	44.9	43.6	.286		92.4	SW.	...	...	...	Clear.
	4 25	14.9	761.00	29.885	44.4	43.9	.297	9 A. M.: (D. 46.5)	93.2	SW.	...	...	...	Dense fog.
	6 25	15.4	761.10	29.898	41.5	41.	.268	(A. 52.)	91.9	SW.	...	...	...	Ci-a. in S., fog clearing.
	8 25	14.9	761.25	29.897	49.5	48.8	.350	3 P. M.: (D. 53.)	93.	SW.	...	...	...	Ci-a. in S.
	10 25	15.3	761.10	29.884	53.	52.5	.371		81.	SW.	...	...	...	Ci-a. in S., and hazy.
	12 25	17.3	759.90	29.881	65.3	57.8	.402	(A. 66.)	74.	WSW.	...	...	...	Ci-cu., S., Ci-a.
	14 25	19.5	759.55	29.807	66.8	57.5	.354	9 P. M.: (D. 49.)	69.	SW.	...	...	...	Cu., Ci-cu., Cu-a.
	16 25	20.8	759.45	29.896	67.8	58.8	.402		71.8	SW.	...	...	...	Cu., Ci-cu., Ci-a.
	18 25	19.9	759.90	29.914	63.	56.	.391		78.1	SW.	...	...	...	Cu., Ci-cu., Ci-a.
	20 25	19.5	760.25	29.835	57.	54.6	.410		90.4	SW.	...	...	...	Ci-a., Cu., Ci., Ci-cu.
	22 25	16.4	760.40	29.856	55.6	53.5	.398		91.	SW.	...	...	6	

Day.	Hour.		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Force of vapor, in	Dew point, Foh.	Hygr., Gausseure	Dir. points.	Force, lbs.	Rain, inches.	Sky covered, 8th	Clouds, &c.
	m.	y.													
15	0	25	18.8	760.35	29.841	55.8	53.3	.390	3 A. M.: (D. 48.)	90.1	SW.			6	Ci-cu, Cu., Ci. from SW.
	2	25	18.1	761.25	29.881	53.5	49.6	.324		86.	SW.			6	Ci., Ci-s. from W.
	4	25	17.5	762.05	29.914	51.5	46.8	.392		82.	NNW.			8	Dense Cu., Ci-cu.
	6	25	16.6	763.15	29.961	50.5	44.5	.242	9 A. M.: (D. 34.)	77.	NNW.			8	Ci-s, Ci-cu.
	8	25	16	764.00	29.998	50.7	44.3	.235		75.5	NE.			8	Ci cu., Ci-s., Cu-s., N.
	10	25	16	764.10	30.002	52.2	45.5	.245	(A. 51.5)	74.5	N. by E.			7	Ci-cu., Cu-s. from W.
	12	25	16.3	763.60	29.981	55.3	46.2	.225		69.5	N.			4	Ci., Ci-s., Cu-s.
	14	25	17.	763.40	29.970	57.	47.3	.230		66.5	N.			2	Ci., Ci-s. W.
	16	25	17.	763.55	29.976	56.2	45.	.187		62.	N. by E.			1	Ci., Ci-s. in S.
	18	25	17.6	765.10	30.034	50.2	41.5	.181		66.	N. by W.			1	Clear.
	20	25	15.8	766.25	30.088	47.	39.	.165		66.6	N. by W.			1	S., Cu-s. in N.
	22	25	14.	766.60	30.112	43.4	37.	.166		70.	N. by W.			1	Ci-s, Ci.
	0	25	13.1	766.95	30.130	40.5	35.4	.167		74.	N.			1	Ci-s. from W.
	2	25	12.2	766.85	30.130	37.5	33.7	.169		78.6	N.			1	S.
	4	25	13.4	767.55	30.151	35.7	32.5	.167		82.1	N.			1	Clear.
	6	25	11.8	768.15	30.182	34.	31.5	.168	9 A. M.: (D. 28.5)	84.9	N.			1	Clear.
16	8	25	12.6	768.85	30.208	42.	36.	.162		77.	NE.			1	Clear.
	10	25	12.2	768.65	30.201	46.5	39.	.170	(A. 44.5)	72.	NE.			1	Clear.
	13	25	13.	768.40	30.186	48.3	39.5	.160	3 P. M.: (D. 26.)	67.	NNE.			1	Clear.
	14	25	14.	768.25	30.175	50.7	41.	.163		65.5	NNE.			1	Clear.
	16	25	14.5	768.10	30.166	49.9	40.5	.161	(A. 51.)	63.9	NNE.			1	Clear.
	18	25	13.6	769.00	30.200	43.	38.	.189		76.2	N. by E.			1	Ci-s, S. in W.
	20	25	13.6	769.70	30.234	37.5	34.3	.191		85.	N. by E.			1	Clear.
	22	25	11.6	770.10	30.258	35.6	33.3	.183		87.	N. by E.			1	Ci-s, Ci.

Day.	Date.	Barometer.		Therm°s, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gauges &c.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temp., centigrade.	Old height, millimetres.	Corr. height, inches.	Dry.	Wet.			Dir. points.	Force, lbs.			
17	0 25	10.9	770.10	30.252	34.7	32.5	8 A. M.: (D. 26.5)	87.8	NNE.	..	..	7	Cl-a.
	2 25	10.5	770.15	30.266	34.9	32.5	..	86.3	NNE.	..	..	6	Cl-a.
	4 25	9.9	770.50	30.282	35.	32.5	..	87.6	E. by N.	..	..	7	Cu., Cl-a., N.
	6 25	9.9	770.50	30.282	35.7	33.2	9 A. M.: (D. 31.)	84.8	E.	..	..	4	Cu., Cl., Cl-a.
	8 25	9.8	771.50	30.325	40.7	37.8	(A. 42.5)	83.	E.	..	..	8	Cl-cu., Cu-a. from SW.
	10 25	9.8	771.65	30.320	46.2	42.8	(A. 42.5)	83.	E.	..	..	8	Cl-cu., Cu-a.
	12 25	16.2	771.15	30.307	51.	46.	3 P. M.: (D. 36.5)	78.	E.	..	..	8	Cl-cu., Cu-a.
	14 25	11.4	770.65	30.283	51.4	46.	(A. 50.7)	79.	ESE.	1	..	8	Cl-cu., Cu-a., S., N.
	16 25	11.4	770.50	30.276	49.8	45.	9 P. M.: (D. 40.)	80.	ESE.	1	..	8	Cl-cu., Cu-a., S., N.
	18 25	11.6	771.00	30.294	48.7	44.7	..	82.2	ESE.	..	..	8	Very dark.
	20 25	12.1	771.00	30.292	48.7	45.5	..	82.	ESE.	..	..	8	Very dark.
	22 25	11.8	771.00	30.292	48.7	46.1	..	91.9	E.	..	..	8	Very dark.
19	0 25	17.2	766.30	30.161	57.5	57.	3 A. M.: (D. 47.2)	92.8	E.	..	.02	8	N. from E., raining.
	2 25	16.2	767.60	30.138	57.5	57.	..	93.5	E.	..	..	8	N. from E., raining.
	4 25	16.4	767.00	30.118	60.	60.	..	93.5	E.	..	..	8	N., foggy.
	6 25	18.3	767.05	30.105	*60.9	*60.5	9 A. M.: (D. 62.3)	93.3	ESE.	..	..	8	N., foggy.
	8 25	19.	767.10	30.105	63.	62.5	(D. 62.3)	93.	S.	1	..	8	N., foggy.
	10 25	19.	766.70	30.090	65.2	64.3	(A. 63.5)	93.	S. by W.	..	..	8	N., Cl-cu. from S.
	12 25	20.	766.70	30.044	68.2	66.4	3 P. M.: (D. 62.)	88.	S.	1	..	8	N., Cl-cu. from SSW.
	14 25	21.	765.30	30.025	69.7	66.4	(A. 69.)	87.	S.	1	..	8	N., Cl-cu. from S.
	16 25	21.8	764.60	29.997	67.5	65.	9 P. M.: (D. 62.)	88.4	SSE.	1	..	5	N., Cl-cu., Cl., Cl-a.
	18 25	20.8	764.60	29.999	65.2	63.2	..	90.	SSE.	1	..	6	Cu., Cl-cu., Cl.
	20 25	20.6	764.75	29.996	63.8	62.5	..	90.5	S.	1	..	8	Dark, N.
	22 25	20.5	764.20	29.984	64.2	63.	..	90.5	S.	..	..	8	N., raining.

* Recorded 60.5.

† Recorded 60.9.

October.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

[97]

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Date.	Barometer.					Therm's, Fah.		Force of vapor, line.	Dew point, Fah.	Hygr., Gauges's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
	Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
20	20	0	25	764.10	29.981	63.5	63.	.572	3 A. M.: (D. 62.7)	93.5	SSW.	..	.25	8	N., raining.
		2	25	763.60	29.960	63.5	63.	.572		93.5	SSW.	..	.40	8	N., raining.
		4	25	762.95	29.936	64.5	63.9	.588		93.	SSW.	2	.08	8	N., raining.
		6	25	763.50	29.919	64.	63.5	.582	9 A. M.: (D. 63.4)	94.	SSW.	..	.22	8	N., raining.
		8	25	764.00	29.976	65.5	64.9	.608		93.6	S. by W.	1	.38	8	N., ceased raining.
		10	25	763.65	29.959	65.3	64.7	.604	(A. 66)	92.3	S. by W.	1	.05	8	N., raining.
		12	25	762.75	29.925	64.	63.5	.582	3 P. M.: (D. 63.)	92.	SW. by S.	1	.50	8	N., raining.
		14	25	762.70	29.923	64.5	64.	.591		92.	SW. by S.	1	.10	8	N., raining.
		16	25	763.00	29.934	65.3	64.9	.611	(A. 65.5)	92.	SW. by S.	..	.05	8	N., raining.
		18	25	763.60	29.962	61.6	61.5	.549	9 P. M.: (D. 60.2)	92.	NW.	..	.12	8	N., raining.
		20	25	763.60	29.962	61.7	61.5	.543		91.5	NE.	..	.10	8	N., raining.
		22	25	763.55	29.961	61.3	60.9	.535		92.	NE.	..	.06	8	N., raining.
21	21	0	25	762.90	29.937	60.6	60.1	.519	3 A. M.: (D. 61.5)	92.9	E. by N.	..	.11	8	N., raining.
		2	25	762.25	29.913	59.1	58.7	.497		93.	E. by N.	..	.08	8	N., raining.
		4	25	761.70	29.891	57.5	57.	.467		92.5	NE.	..	.10	8	N., raining.
		6	25	761.70	29.893	56.	54.7	.435	9 A. M.: (D. 55.)	93.1	NE.	..	.01	8	N., raining.
		8	25	760.95	29.867	56.	55.3	.439		91.	E. by N.	..	.01	8	N., drizzling rain.
		10	25	760.30	29.844	56.	55.4	.441	(A. 56.4)	91.	ENE.	..	.01	8	N., drizzling rain.
		12	25	768.30	29.766	57.	56.8	.463	3 P. M.: (D. 57.)	92.	NE.	..	.03	8	N., mist.
		14	25	766.50	28.694	58.5	57.8	.478		91.5	NE.	..	.03	8	N., drizzling rain.
		16	25	765.55	29.657	58.5	58.2	.490	(A. 58.)	91.4	NE.	..	.03	8	N., raining.
		18	25	764.60	29.620	58.	57.8	.484		94.	NE.	..	.03	8	N., ceased raining.
		20	25	754.20	29.603	57.5	57.	.467		94.	NW. by N.	..	.03	8	N., raining slightly.
		22	25	753.00	29.555	57.2	57.	.471		94.1	NW. by N.	..	.13	8	N., raining slightly.

OCTOBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1848.

Date.		Barometer.				Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gauges's.	Wind.		Rain, inches.	Sky covered, Sols.	Clouds, &c.
Day.	Hour.	Temperature, centigrade.	Old height, millimetres.	Corr. height, inches.	Dry.	Wet.	Dir. points.				Force, lbs.				
23	0 25	18.7	752.85	29.550	56.4	56.	.454	...	92.9	NW.	...	...	...	8	N.
	2 25	18.4	753.20	29.564	56.6	55.8	.446	...	92.2	NW.	...	...	...	8	N.
	4 25	18.	753.90	29.593	57.	53.	.370	...	83.9	NNW.	4	...	...	8	N.
	6 25	16.6	756.70	29.710	50.9	45.6	.262	...	78.	NNW.	4	...	...	7	Cu. and N.
	8 25	16.	759.25	29.811	51.	44.7	.240	...	74.	NNW.	3	...	...	1	Cu., Ci-cu. from N.
	10 25	15.	760.25	29.856	51.6	44.	.219	...	69.	NNW.	3	...	...	2	Cu., Ci cu. from N.
	12 25	14.6	760.45	29.866	53.6	45.2	.233	...	67.	NNW.	2	...	...	..	A few scattered Cu.
	14 25	15.	761.40	29.901	54.4	44.3	.194	...	62.	NNW.	2	...	...	..	Clear.
	16 25	15.5	762.30	29.933	54.	44.1	.194	...	61.	NW.	...	...	...	..	Clear.
	18 25	15.1	763.55	29.985	47.	42.7	.243	...	73.	NW.	...	...	...	..	Clear.
	20 25	14.2	763.80	30.000	43.	41.	.251	...	75.	NW.	...	...	...	..	Clear.
	22 25	13.4	763.35	29.990	41.5	39.7	.242	...	77.2	NW.	...	...	...	..	Clear.
23	0 25	12.9	763.25	29.984	40.3	39.	.240	3 A. M.: 30.9	90.9	NW.	...	...	...	..	Clear.
	2 25	12.1	762.75	29.968	38.5	37.5	.231	(D. 38.2)	93.1	NW.	...	...	...	..	Clear.
	4 25	11.5	762.75	29.973	38.5	37.7	.236	...	93.1	NW.	...	...	...	..	Clear.
	6 25	11.	762.60	29.967	39.5	38.8	.245	9 A. M.: 38.8	93.9	NW.	...	...	...	..	Clear.
	8 25	11.5	762.00	29.942	47.	44.5	.281	(D. 39.5)	84.	SSW.	...	...	...	..	Clear.
	10 25	12.6	761.20	29.964	56.5	50.5	.313	(A. 51.)	76.	SW.	...	...	...	..	Clear.
	12 25	14.4	759.45	29.827	62.2	52.4	.295	...	69.	SSW.	3	...	...	..	Clear.
	14 25	16.	758.25	29.772	64.	54.5	.329	...	68.	SW.	1	...	...	..	Clear.
	16 25	19.8	758.55	29.767	63.	54.	.327	...	67.5	SW.	1	...	...	..	Light Ci-s in Hor., hazy.
	18 25	18.5	758.45	29.768	55.5	51.8	.356	9 P. M.: 51.8	67.5	SSW.	...	...	...	..	Heavy.
	20 25	17.4	758.90	29.791	55.7	50.	.309	(D. 47.2)	69.	SSW.	...	...	...	..	Clear.
	22 25	16.5	759.50	29.820	51.9	48.3	.312	...	69.5	SW.	...	...	...	..	Clear.

Date.		Barometer.				Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., percentage.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Dir. points.				Force, lbs.				
24	0	25	16.1	760.65	29.867	54.4	46.6	.245	3 A. M.: (D. 39.)	72.2	WSW.			2	Ci., Ci-a.
	2	25	14.8	761.80	29.919	50.3	40.7	.164		63.4	NW.			3	Light Ci-a.
	4	25	13.3	763.25	29.981	47.	39.	.165		66.9	NW.byN.	1			Clear.
	6	25	12.5	764.75	30.146	43.1	35.8	.181	9 A. M.: (D. 31.2)	66.1	NW.byN.				S., Ci-a.
	8	25	12.6	765.90	30.091	44.8	37.1	.151		66.9	NW.byN.				S., Ci-a.
	10	25	15.4	766.30	30.089	48.3	39.6	.164	(A. 45.3)	65.3	NNW.			2	Ci-a., Ci-cu., Ci.
	12	25	14.4	765.50	30.066	49.6	40.4	.164	3 P. M.: (D. 38.5)	64.	NNW.	1		3	Ci-a., Ci-cu., Ci.
	14	25	14.6	765.15	30.058	51.5	42.4	.184	(A. 59.)	63.5	NW.			4	Ca., Ci-cu., Ci., Ci-a., mottled Ci-a.
	16	25	15.1	765.25	30.052	50.	41.7	.187	9 P. M.: (D. 32.)	64.5	NW.			6	Ci-a., Ci-cu., Cu-a.
	18	25	14.9	765.65	30.069	47.2	41.7	.219		67.	NW.byN.			6	Cu-a., Cu., S.
	20	25	13.4	765.45	30.068	44.7	40.8	.228		68.8	NW.byN.			2	Clouds in SE. and E.
26	22	25	13.	765.15	30.058	42.1	37.6	.193		73.	NE. by E.				Light clouds in SE. Hor.
	0	25	6.4	758.65	29.835	30.	26.4	.122	3 A. M.: (D. 30.)	74.5	W.				Clear.
	2	25	5.5	758.10	29.817	30.	26.	.116		74.	W.				Clear.
	4	25	4.8	758.10	29.821	29.5	25.5	.113		74.1	W.				Clear.
	6	25	4.3	758.50	29.840	28.4	25.3	.122	9 A. M.: (D. 19.4)	77.	SW.				Foggy.
	8	25	5.1	759.10	29.858	32.5	27.5	.114	(A. 35.)	72.5	WSW.	1			Clear.
	10	25	5.3	758.85	29.848	36.7	32.	.146		69.	W.	2			Hazy.
	12	25	5.8	758.65	29.838	39.2	31.8	.114	3 P. M.: (D. 18.)	69.	WNW.	4		3	Ci., Cu., Ci-cu. WNW.
	14	25	8.	759.25	29.850	40.3	33.2	.128	(A. 40.2)	69.	WNW.	3		7	Ci-cu., Cu. NW.
	16	25	7.4	760.30	29.895	39.6	32.9	.131	9 P. M.: (D. 25.)	71.5	WNW.	2		2	Ci-cu., hazy.
	18	25	6.4	762.45	29.964	37.3	31.5	.131		73.5	W.	1			Clear.
20	25	6.4	764.30	30.057	36.	31.	.185		78.	W.	1			Clear.	
22	25	6.0	765.60	30.109	34.6	30.3	.139							Clear.	

Day.	Hour.	Date.	Barometer.			Therm'rs, Fahr.		Force of vapor, in.	Low point, Fahr.	Hyg. - Humidity, %	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
			Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
27	0	25	5.9	766.55	30.149	32.9	28.5	.136	9 A. M.: (D. 19.5)	75.9	W.	..	..	..	Clear.
	2	26	5.4	767.45	30.156	30.7	37.	.125		76.7	W.	..	..	..	Clear.
	4	26	4.9	768.20	30.218	27.7	25.5	.133		88.9	W.	..	..	..	Clear.
	6	26	4.3	769.60	30.377	39.	27.	.144		96.7	SW. by W.	..	..	..	Misty.
	8	26	5.	770.50	30.307	35.	29.5	.119	9 A. M.: (D. 17.5)	76.5	W.	..	..	..	Clear, very little Ci-s. in W.
	10	26	5.8	770.00	30.308	38.1	31.6	.122	(A. 36.5)	69.	W.	..	..	..	Clear.
	12	26	7.	770.10	30.333	41.8	33.3	.112		67.	SW.	..	..	..	Cu, Ci., S., Ci-s.
	14	26	8.4	769.15	30.239	44.4	37.5	.163		67.	S.	..	..	..	Cu, Ca., S., Ci-cu.
	16	26	10.	769.30	30.235	43.9	35.2	.137		66.5	SSW.	..	..	..	Ci, Ci-s.
	18	26	9.	769.45	30.247	37.6	34.5	.163		74.	S.	..	..	..	Ci, Ci-cu.
	20	26	9.6	769.50	30.251	36.6	33.3	.171	9 P. M.: (D. 26.)	77.5	SSE.	..	..	..	Cu, Ci., Ci-p.
	22	26	8.	769.00	30.234	35.2	33.	.171		79.5	SSE.	..	..	..	Ci, Cu., Ci-cu.
	0	25	8.1	768.90	30.237	35.1	32.4	.171		82.1	SSE.	..	..	..	Cu, Cu-s. around Hor.
	2	25	8.7	768.00	30.193	32.5	31.5	.173	(D. 28.5)	90.	S.	..	..	..	Cu, Ci-cu.
	4	25	7.6	768.25	30.203	33.7	32.4	.187		93.5	S.	..	..	..	Cu, Cu-s. around Hor.
	6	25	7.9	768.00	30.196	32.5	31.5	.135	9 A. M.: (D. 36.)	93.2	S.	..	..	..	Si, Ci-cu., Ci-s., Cu., Cu-s.
28	8	25	10.5	768.30	30.195	33.8	37.3	.233	(A. 45.)	91.	S.	..	..	..	Si, Ci-cu., Ci-s., Cu., Cu-s.
	10	25	9.2	767.35	30.163	49.9	41.5	.195		71.	S.	..	..	..	Si, Ci-cu., Ci-s., Cu., Cu-s.
	12	25	10.1	766.30	30.118	53.	42.9	.177	3 P. M.: (D. 36.5)	66.3	S.	..	..	..	Ci., S., Ci-s.
	14	25	18.5	765.55	30.071	57.1	45.5	.211		63.5	S.	..	..	..	S., Ci-s. in Hor.
	16	25	13.	765.00	30.052	54.5	45.5	.218	(A. 55.)	65.	S.	..	..	..	Ci-cu., Ci-s., Cu-s., S. W.
	18	25	13.	765.60	30.076	51.3	45.3	.250	9 P. M.: (D. 40.7)	71.	S.	..	..	..	Very dark.
	20	25	13.	765.90	30.086	49.7	46.	.265		83.	S.	..	..	..	Very dark.
	22	25	13.2	765.75	30.091	50.	46.4	.290		84.	S.	..	..	..	Very dark.

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Sausure's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
29	A. M.													
	0 25	12.3	765.75	30.080	48.8	45.7	.287	3 A. M.: (D. 47.)	86.5	S.	..	..	8	N., raining.
	2 25	13.2	765.40	30.067	48.	45.7	.286	.....	92.3	S.	..	.10	8	N., raining.
	4 25	13.6	764.35	30.024	47.5	46.9	.329	9 A. M.: (D. 50.)	94.9	ESE.	..	.10	8	N., raining.
	6 25	15.3	762.80	29.955	50.	49.5	.361	.....	94.	ENE.	..	.20	8	N., raining hard.
	8 25	13.8	761.30	29.903	52.2	52.	.398	(A. 52.5)	93.	ENE.	..	.35	8	N. from S., rain.
	10 25	14.5	758.90	29.806	57.2	56.9	.469	3 P. M.: (D. 58.7)	92.5	E. by N.	..	.40	8	Do., raining hard.
	12 25	15.	756.25	29.698	59.6	59.4	.511	.....	92.5	S. by E.	..	.80	8	Do., raining hard.
	14 25	15.8	754.00	29.606	61.	60.7	.533	(A. 60.3)	93.	SSE.	3	.30	8	Do., raining hard.
	16 25	16.6	752.70	29.551	61.3	60.5	.533	9 P. M.: (D. 60.5)	91.5	SSE.	7	.40	8	Do., raining hard.
	18 25	17.	751.40	29.500	63.5	61.6	.531	.....	91.5	SSE.	5	.30	8	Do., raining hard.
	20 25	17.7	750.85	29.474	64.	63.3	.578	.....	91.5	S.	3	.08	8	Do., raining hard.
	22 25	18.6	750.05	29.439	64.	63.5	.563	.....	91.5	S.	3	.05	8	Do., raining gently.
	0 25	18.7	750.15	29.443	63.7	63.2	.577	3 A. M.: (D. 56.9)	94.1	SW.	..	..	8	N., raining.
	2 25	19.	750.75	29.465	63.2	61.	.528	.....	92.2	WNW.	..	..	8	N., ceased raining.
	4 25	19.9	751.90	29.505	59.5	58.	.473	.....	90.	WNW.	..	..	8	Heavy N.
	6 25	18.6	752.00	29.516	55.5	53.5	.399	9 A. M.: (D. 50.)	89.9	NW.	..	..	1	S, Ci. a, N.
	8 25	18.5	752.60	29.536	56.3	53.5	.391	(A. 55.8)	88.	NNW.	1	..	8	Ci-cu, N., Cu. a. from SSW.
	10 25	17.7	753.10	29.563	55.2	51.4	.350	.....	84.	NNW.	..	..	8	Ci-cu, Cu. a. from N.
	12 25	17.4	753.20	29.572	54.	50.	.299	3 P. M.: (D. 44.7)	83.	NNW.	1	..	8	Ci-cu, Cu. a. from SSW.
	14 25	17.6	753.25	29.570	56.5	50.8	.332	(A. 55.5)	81.	NNW.	..	..	5	Ci-cu, Cu., Cu. a. from NW.
	16 25	16.3	754.05	29.607	54.4	49.3	.305	.....	79.	NNW.	..	..	3	Do., from W. and from NW.
	18 25	15.5	755.30	29.652	50.1	46.	.280	9 P. M.: (D. 37.)	80.	NNW.	..	..	3	Cu., Cu. a, Ci., Ci-cu. from SW.
	20 25	15.9	755.45	29.665	48.5	44.3	.260	.....	80.	NNW.	..	..	5	Cu., Cu. a.
	22 25	14.5	755.55	29.675	45.7	42.5	.243	.....	80.5	NW.	..	..	..	Clear.
30	0 25	18.7	750.15	29.443	63.7	63.2	.577	3 A. M.: (D. 56.9)	94.1	SW.	..	..	8	N., raining.
	2 25	19.	750.75	29.465	63.2	61.	.528	.....	92.2	WNW.	..	..	8	N., ceased raining.
	4 25	19.9	751.90	29.505	59.5	58.	.473	.....	90.	WNW.	..	..	8	Heavy N.
	6 25	18.6	752.00	29.516	55.5	53.5	.399	9 A. M.: (D. 50.)	89.9	NW.	..	..	1	S, Ci. a, N.
	8 25	18.5	752.60	29.536	56.3	53.5	.391	(A. 55.8)	88.	NNW.	1	..	8	Ci-cu, N., Cu. a. from SSW.
	10 25	17.7	753.10	29.563	55.2	51.4	.350	.....	84.	NNW.	..	..	8	Ci-cu, Cu. a. from N.
	12 25	17.4	753.20	29.572	54.	50.	.299	3 P. M.: (D. 44.7)	83.	NNW.	1	..	8	Ci-cu, Cu. a. from SSW.
	14 25	17.6	753.25	29.570	56.5	50.8	.332	(A. 55.5)	81.	NNW.	..	..	5	Ci-cu, Cu., Cu. a. from NW.
	16 25	16.3	754.05	29.607	54.4	49.3	.305	.....	79.	NNW.	..	..	3	Do., from W. and from NW.
	18 25	15.5	755.30	29.652	50.1	46.	.280	9 P. M.: (D. 37.)	80.	NNW.	..	..	3	Cu., Cu. a, Ci., Ci-cu. from SW.
	20 25	15.9	755.45	29.665	48.5	44.3	.260	.....	80.	NNW.	..	..	5	Cu., Cu. a.
	22 25	14.5	755.55	29.675	45.7	42.5	.243	.....	80.5	NW.	..	..	..	Clear.

October.] DAILY METEOROLOGICAL OBSERVATIONS. [1940.

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetre.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
15	0	14.	756.00	29.694	44.5	41.5	.245	3 A. M.: (D. 38.2)	83.7	NW.	..	..	3	Cu., Cu-s.
	2	13.5	756.40	29.711	43.	40.	.230		86.	NW.	..	..	1	Clouds in Hor.
	4	12.8	757.00	29.739	43.	40.4	.239		86.9	NW.	..	..	2	Cu., Ci-cu.
	6	11.6	757.00	29.744	43.4	38.5	.196	9 A. M.: (D. 30.3)	76.9	NW.	..	..	8	N., Cu.
	8	12.	758.55	29.804	43.5	38.7	.199	(D. 30.3)	77.	NW.	..	..	8	Ci-cu., S., Cu-s.
	10	12.	758.50	29.803	43.7	39.3	.175	(A. 44.)	71.5	NNW.	..	..	8	Cu., Ci-cu., Cu-s. from NW.
	12	12.4	757.86	29.775	43.	40.8	.191	3 P. M.: (D. 29.4)	67.5	NNW.	1	..	6	Cu., Ci-cu. from NW.
	14	13.7	757.70	29.768	50.	41.1	.175		65.5	NNW.	..	..	3	Cu., Ci-cu. from NW.
	16	13.	759.00	29.816	43.5	40.8	.186	(A. 50.3)	67.5	WNW.	2	..	1	Cu., Ci., Cu-s. from NW.
	18	13.5	760.05	29.861	44.6	39.3	.197	9 P. M.: (D. 33.)	71.	WNW.	..	..	8	Ci-s., Ci. in Hor.
	20	12.	760.70	29.889	43.6	39.	.204		74.5	WNW.	..	..	8	Cu., Cu-s.
	22	11.8	761.20	29.909	44.	39.5	.210		78.	WNW.	..	..	2	Cu., Ci-cu., Cu-s.

Date.		Barometer.				Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saunure's.	Wind.		Rain, inches.*	Sky covered, Subs.	Clouds, &c.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Dir. points.				Force, lbs.				
2	h. m.														
	0 25	11.6	768.95	30.215	38.5	36.		.202	3 A. M.: (D. 39.5)	88.	NW.				Clear.
	2 25	10.	769.55	30.245	40.3	37.		.201		85.	NNE.				Clear.
	4 25	9.5	769.90	30.263	39.5	36.5		.200		85.1	ENE.				Clear.
	6 25	9.1	770.70	30.295	38.6	36.8		.216	9 A. M.: (D. 36.2)	86.1	ENE.				Foggy, with S.
	8 25	9.9	771.65	30.330	42.6	39.6		.227		86.	NE. by E.				Hazy.
	10 25	10.5	772.20	30.348	46.7	42.7		.244	(A. 43.4)	82.	E. by N.				Hazy.
	12 25	11.3	771.65	30.333	50.3	46.5		.287	3 P. M.: (D. 40.6)	78.5	ENE.				Hazy.
	14 25	12.3	771.25	30.303	52.3	46.8		.271		78.	ENE.				S.
	16 25	13.5	771.30	30.298	50.8	46.2		.276	(A. 52.)	80.	ENE.			1	Clear.
	18 25	13.3	771.30	30.299	46.2	43.3		.264	9 P. M.: (D. 37.)	80.7	ENE.				Clear.
	20 25	12.5	771.10	30.296	42.	40.5		.252		82.	NE. by E.				Clear.
3	22 25	11.5	770.40	30.272	40.3	39.2		.245		82.1	NE. by E.				Clear.
	0 25	10.9	770.00	30.260	39.	38.		.235	3 A. M.: (D. 32.5)	93.1	NE. by E.				Clear.
	2 25	10.	769.20	30.232	36.5	36.		.224		96.9	NE. by E.				Clear.
	4 25	9.5	768.80	30.220	36.4	35.5		.216		94.8	NE. by E.				Clear.
	6 25	8.6	768.45	30.210	33.8	33.5		.207	9 A. M.: (D. 38.5)	94.9	N. by E.				Hazy, S. around Hor.
	8 25	10.6	769.00	30.232	43.9	41.1		.243		86.5	NE. by N.				Light Ci.-s. in SW.
	10 25	10.5	768.10	30.187	49.	44.5		.258	(A. 43.)	80.	NNE.				Some Ci.-s. in W.
	12 25	11.3	766.50	30.131	53.7	45.9		.235	3 P. M.: (D. 37.6)	70.5	NE.			1	Ci.-s. S.
	14 25	13.	766.00	30.092	57.5	48.2		.245		65.5	ENE.				Ci., S.
	16 25	14.6	765.75	30.074	56.5	47.8		.247	(A. 56.)	68.	NE.			3	Light Ci. and S.
	18 25	14.	765.55	30.070	50.	45.5		.269	9 P. M.: (D. 33.)	70.	NE.			1	Ci., Ci.-s. S.
	20 25	13.6	765.25	30.059	49.5	43.3		.237		70.5	NE.			2	Very light Ci. and S.
22 25	13.3	764.60	30.036	47.6	43.4		.238		74.1	NE.				S., hazy.	

* Record imperfect, from not noting properly the snow of 18th, 19th, and 27th. Amount recorded at Pennsylvania Hospital, in Philadelphia, .48 inch of water.

NOVEMBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.]

Date.	Hour.	Barometer.			Thermom. Fahr.		Force of vapor, lbs.	Dew point, Fahr.	Hygr., Gannett's	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, centigrade.	Old height, millibars.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
4	0	12.5	764.10	30.020	46.5	43.	.233	3 A. M.: (D. 35.6)	79.5	NE. by N.	..	..	..	S. hazy.
	2	25	764.00	30.017	44.	40.8	.236		84.3	NE. by N.	..	..	4	Some Ci-a.
	4	25	763.90	30.014	46.8	43.5	.239		79.	NE. by N.	..	..	7	Thin Ci-a.
	6	25	764.15	30.024	44.3	39.8	.212	9 A. M.: (D. 33.5)	79.5	NE. by N.	..	..	4	N., Cu., Ci-cu.
	8	25	764.60	30.040	49.8	43.4	.226	(A. 30.6)	75.3	NNE.	..	..	6	Ci., S.
	10	25	764.90	30.049	54.1	44.2	.194	3 P. M.: (D. 32.6)	65.	NE.	..	..	3	Ci., S.
	12	25	763.90	30.009	56.6	45.1	.186		61.	ENE.	..	..	3	Ci., S.
	14	25	763.75	30.008	58.	46.3	.197	(A. 37.5)	61.	ENE.	..	..	1	Ci., S.
	16	25	764.00	30.003	54.7	46.3	.234	9 P. M.: (D. 35.3)	64.5	NE. by E.	..	..	..	Clear.
	18	25	764.10	30.009	49.4	43.2	.225		78.	ENE.	..	..	..	Clear.
5	0	25	764.20	30.021	46.6	42.2	.235		82.	NE.	..	..	..	Clear.
	2	25	764.10	30.016	46.	43.	.238		89.	NE.	..	..	..	Clear.
	4	25	763.95	30.010	43.1	40.8	.246	3 A. M.: (D. 33.8)	90.9	ENE.	..	..	..	Clear.
	6	25	763.60	30.002	41.	39.	.232		93.5	NE.	..	..	..	Some light N., Cu., Ci-a.
	8	25	763.20	29.989	38.6	37.5	.230		95.5	NE.	..	..	2	Ci., hazy.
	10	25	763.45	30.003	36.5	35.5	.215	9 A. M.: (D. 38.2)	90.	NNE.	..	..	3	Ci., S.
	12	25	763.30	29.998	41.8	39.8	.240	(A. 45.)	81.	NE.	..	..	3	Ci., S.
	14	25	763.10	29.986	50.2	45.7	.271	3 P. M.: (D. 41.9)	75.	N.	..	..	3	Ci., Ci-cu., S.
	16	25	761.50	29.918	53.8	47.3	.267		71.5	N.	..	..	7	Ci., Ci-cu., S., Ci-a.
	18	25	760.75	29.882	56.6	49.5	.273	(A. 57.3)	72.4	NNE.	..	..	1	Light Ci., Ci-a.
20	25	15.	761.00	29.887	51.7	47.	.284	9 P. M.: (D. 39.5)	74.8	N.	..	..	..	Hazy, with some Ci.
	22	25	761.00	29.895	51.7	46.8	.279		80.	NNW.	..	..	5	Ci.
22	25	13.3	760.90	29.891	49.7	45.7	.277		82.	NNW.	

November.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

[97]

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Date.	Hour.	Barometer.			Therm'n, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges's.	Wind.		Rain, inches.	Sky covered, Sths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6	0 25	13.	760.80	29.888	47.5	44.5	.275	3 A. M.: (D. 41.)	85.9	NNW.	..	..	6	Fine Ci. and Ci-a.
	2 25	12.6	760.65	29.885	46.5	44.	.276	..	88.7	NNW.	..	..	3	Ci., Ci-a, N.
	4 25	12.1	760.55	29.882	46.	43.5	.271	..	89.1	NNW.	..	..	..	Cu. and N. in E. Hor.
	6 25	11.4	760.30	29.876	45.2	42.5	.258	9 A. M.: (D. 37.4)	87.9	NNW.	..	..	8	Ci., Ci-a, Cu., N.
	8 25	11.2	760.65	29.891	49.	43.5	.215	(A. 51.4)	67.	NNW.	1	..	6	Ci., Ci-a, S.
	10 25	12.	760.80	29.893	54.5	44.4	.195	3 P. M.: (D. 34.6)	63.	N. by W.	2	..	5	Ci., Ci-a, S., with Cu-a.
	12 25	13.	760.00	29.856	57.	45.2	.185	(A. 57.2)	60.	NNW.	1	..	8	Ci., Ci-a, S., with Cu-a.
	14 25	14.	759.90	29.848	59.5	46.2	.179	..	66.5	NNW.	..	..	3	Ci., Ci-a, S.
	16 25	14.	760.30	29.864	56.5	46.8	.235	..	72.	NNW.	..	..	3	Ci., Ci-a, halo.
	18 25	14.	760.65	29.878	51.1	43.9	.222	..	73.	NNW.	..	..	3	Ci., Ci-a, halo.
	20 25	13.4	761.00	29.893	50.4	43.1	.213	..	73.	NNW.	..	..	1	Ci., Ci-a.
	22 25	13.	761.65	29.921	48.	41.5	.206	..	73.	NNW.	..	..	6	Ci., Ci-a.
	0 25	12.8	762.00	29.938	48.1	40.5	.195	3 A. M.: (D. 32.)	71.2	N. by E.	..	..	4	Ci., Ci-a, with Ci-cu.
	2 25	12.	762.00	29.939	47.	40.	.186	..	71.5	N.	..	..	..	A Cu. cloud in E. Hor.
	4 25	11.4	762.65	29.968	45.	38.6	.180	..	74.2	N.	..	..	..	Cu., Cu-a, Ci., S. in Hor.
	6 25	11.	763.35	29.997	40.5	36.3	.193	9 A. M.: (D. 32.3)	79.5	N. by E.	..	..	..	Ci., Cu-a, in Hor., hazy.
7	8 25	11.3	763.80	30.013	46.7	40.2	.185	(A. 50.)	76.	N.	..	..	4	Ci., Ci-a.
	10 25	11.7	764.00	30.019	50.	43.4	.224	3 P. M.: (D. 36.)	71.	ENE.	1	..	4	Ci., Ci-a.
	12 25	13.	763.30	29.981	51.2	45.	.244	(A. 50.)	73.	ENE.	1	..	1	Ci., Ci-cu, Ci-a.
	14 25	14.2	763.30	29.980	53.	46.5	.269	(A. 50.)	78.	E.	..	..	7	Ci., Ci-cu, Cu., Ci-a.
	16 25	14.	763.70	29.997	49.6	45.	.262	9 P. M.: (D. 38.1)	81.	ENE.	..	..	8	N., Cu.
	18 25	13.5	763.95	30.008	47.5	44.	.265	..	84.7	E.	..	..	8	N., Cu.
	20 25	12.9	763.75	30.004	47.1	43.5	.259	..	86.	E.	..	..	8	Very light N.
	22 25	12.4	763.95	29.975	46.1	43.4	.268	..	87.8	ENE.	..	..	8	

DAILY METEOROLOGICAL OBSERVATIONS.

November.]

Day.	Hour.	Date.	Barometer.			Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gaumme's	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
			Température, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
61	9	A. M.													
		0 35	12.3	754.30	29.636	47.	46.3	.321	3 A. M.: (D. 45.)	92.5	E. by N.	...	...	8	N. from NW.
		2 35	12.	753.75	29.615	46.5	45.8	.315		93.4	E. by N.	...	...	8	N., Cu. from NW.
		4 35	12.	753.45	29.603	46.5	45.5	.309		92.6	E. by N.	...	...	8	N. from NW.
		6 35	12.	753.60	29.609	46.1	45.6	.315	9 A. M.: (D. 41.5)	95.9	E. by N.	...	...	8	N. from NW.
		8 35	12.5	754.15	29.639	47.5	44.5	.375		85.	NW.	...	...	8	Ci. Cu., S., N. from NW.
		10 35	12.	754.40	29.641	47.6	44.4	.372	(A. 47.8)	84.	NW.	2	...	8	Ci. Cu., S., N. from NW.
		12 35	12.	754.25	29.635	46.8	44.2	.377	3 P. M.: (D. 41.3)	86.5	WNW.	3	...	8	Ci. Cu., Cu., N. from NW.
		14 35	11.7	754.40	29.642	49.3	45.5	.378		82.5	WNW.	3	...	8	Ci. Cu., Cu., Cu-a, N.
		16 35	12.	755.25	29.674	50.5	45.6	.267	(A. 49.5)	79.7	WNW.	1	...	8	Ci. Cu., Cu-a, S., N. from NW.
10		18 35	12.	755.70	29.692	50.3	45.6	.269	9 P. M.: (D. 41.5)	79.7	WNW.	1	...	8	Cu. Cu-a from NW.
		20 35	12.	755.70	29.692	50.	44.9	.256		78.	WNW.	2	...	8	Ci. Cu., Ci-a, Cu-a, S.
		22 35	11.8	755.45	29.683	47.5	43.	.243		76.	NW.	2	...	4	Cu., N., Ci., Ci-a, S.
		0 35	11.9	755.75	29.694	48.	43.5	.237	3 A. M.: (D. 38.5)	75.8	NW.	?	...	8	Cu., Cu-a, Ci., Ci-a.
		2 35	11.1	756.15	29.713	47.4	42.	.233		76.1	NW.	?	...	8	Cu., N., Cu-a, Ci-cu.
		4 35	11.	756.65	29.734	47.7	43.	.241		76.2	NW.	?	...	8	Cu., N., Cu-a, Ci-cu.
		6 35	10.8	757.80	29.781	48.5	44.	.255	9 A. M.: (D. 39.7)	78.8	WNW.	3	...	8	N., Cu-a from NW.
		8 35	11.3	758.50	29.805	49.8	44.8	.250		78.	WNW.	3	...	8	Ci-cu, N., Cu-a from N.
		10 35	11.6	759.25	29.832	51.	45.	.247	(A. 50.)	76.	N. by W.	3	...	8	Ci-cu, N., Cu-a from N.
		12 35	12.	759.20	29.829	52.5	45.5	.242	3 P. M.: (D. 39.3)	73.	N.	7	...	7	Ci-cu, Cu. from N.
11		14 35	12.6	759.80	29.851	53.7	46.5	.251		73.	NNW.	4	...	1	Ci cu, Cu-a.
		16 35	13.	761.00	29.895	50.6	44.5	.241	(A. 51.4)	74.5	NNW.	4	...	1	Ci-cu, Cu-a.
		18 35	12.7	761.50	29.917	48.	43.4	.248	9 P. M.: (D. 38.4)	78.2	NNW.	4	...	1	S., Ci-a.
		20 35	12.	761.25	29.910	46.	41.3	.224		78.	NNW.	3	...	...	Ci a in Hor.
		22 35	11.3	761.25	29.913	44.5	39.5	.204		77.	NNW.	3	...	...	Clear.

* Recorded 46.3.

† Recorded 47.

NOVEMBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

Date.		Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Gaussure's.	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
Day.	Hour.	Temp'ture, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
11	A. m.													
	0	10.5	762.10	29.950	43.3	38.6	.200	3 A. M.: (D. 38.4)	72.	N.			Clear.	
	2	10.	761.95	29.948	41.6	37.1	.188		77.1	NNW.	1		Clear.	
	4	9.1	761.80	29.945	39.1	35.2	.179		78.9	NNW.	1		Clear.	
	6	8.8	762.50	29.974	37.7	34.	.172	9 A. M.: (D. 30.4)	79.	N.	1		Clear.	
	8	9.	763.20	30.000	40.1	35.7	.177		77.5	NNW.	1		Clear.	
	10	9.4	763.20	29.998	45.7	40.2	.204	(A. 42.)	76.	N. by E.	2		Few small detached Cu.	
	12	10.6	762.00	29.946	49.6	43.2	.223	3 P. M.: (D. 36.3)	74.	N. by E.	1		Cu., Cu-s., S. in SE. Hor.	
	14	11.5	761.80	29.935	52.6	45.3	.236	(A. 52.2)	72.	N. by E.	1		6 Ci., Ci-cu., Cu-s. from ENE.	
	16	12.6	761.45	29.916	51.3	44.8	.239		73.5	N.			3 Ci., Ci cu., Ci s., S.	
	18	12.5	763.35	29.990	47.2	42.5	.235	9 P. M.: (D. 35.)	76.5	NE.			Clear.	
	20	11.9	762.10	29.943	44.4	40.6	.227		80.	ENE.			Clear.	
12	22	11.3	762.30	29.954	42.	39.2	.225		83.5	NE.			8 Ci., Ci cu., Cts. from E.	
	0	11.	762.60	29.964	42.8	39.8	.229	3 A. M.: (D. 34.5)	84.3	NNW.			Overcast, misty.	
	2	11.	761.30	29.917	42.8	40.	.232		86.2	NNE.			Overcast, misty.	
	4	10.5	760.35	29.882	42.	39.8	.238		88.5	ENE.			Overcast, misty.	
	6	10.3	761.25	29.918	40.5	39.5	.249	9 A. M.: (D. 38.2)	94.	NNW.			8 N., very light rain.	
	8	10.	760.90	29.906	42.6	41.2	.262		90.	NNW.			7 Ci., Ci-cu., Cu-s., S., N.	
	10	11.	760.70	29.894	46.6	44.	.276	(A. 44.)	86.5	NW. by N.			7 Cu., Ci-cu. from NW.	
	12	12.	759.00	29.831	49.	45.5	.281	3 P. M.: (D. 43.)	83.	N.			3 Cu., with Cu-s. from NW.	
	14	13.	758.10	29.781	52.7	47.7	.289		79.	NW. by N.			1 Cu., Ci cu., hazy.	
	16	14.8	758.00	29.769	52.3	47.2	.282	(A. 52.7)	78.5	NW.			A little Cu s. in E. Hor., hazy.	
	18	14.7	758.30	29.781	46.5	43.1	.267	9 P. M.: (D. 38.4)	86.4	NW.			Clear.	
	20	14.	758.00	29.773	42.5	41.	.257		91.	NW.			Clear.	
	22	13.	757.80	29.770	47.	42.5	.238		80.	NW.			Clear.	

NOVEMBER.]

DAILY METEOROLOGICAL OBSERVATIONS

[1860

Day.	Hour.	Barometer		Therm°s, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, Centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.			Dir. points.	Force, lbs.			
13	0 25	12.	757.80	29.775	43.	40.5	3 A. M.: .241	84.5	NW.				Clear.
	2 25	11.7	757.70	29.772	46.5	41.6	(D. 37.6) .225	79.	NW.	1			Clear.
	4 25	11.1	757.90	29.783	44.	38.9	.197	77.2	NW.			7	Ci.-s.
	6 25	10.6	758.90	29.825	41.1	37.	9 A. M.: .192	80.	NW.				Ci.-s., S.
	8 25	11.	759.25	29.836	44.1	39.2	(D. 36.5) .202	78.5	NW. by W.			4	Ci.-s in S.
	10 25	11.5	759.00	29.824	49.4	41.7	(A. 46.8) .195	70.5	WNW.				Ci.-s in S.
	12 25	12.	758.25	29.792	52.	41.5	3 P. M.: .161	62.	W. by N.	2			Ci.-s in S.
	14 25	13.	758.25	29.787	53.	42.	(D. 33.4) .160	59.5	W. by N.	1			Very light Ci., Ci.-s in Hor.
	16 25	13.6	759.15	29.819	50.5	40.	(A. 52.6) .146	59.5	W. by N.	1			Very light Ci., Ci.-s in Hor.
	18 25	12.7	760.30	29.870	45.7	37.6	9 P. M.: .152	63.5	NW.				Clear.
14	20 25	11.0	761.20	29.908	43.3	36.1	(D. 32.5) .149	67.	NW.				Clear.
	22 25	11.	761.50	29.925	41.9	35.5	.154	68.	NW.				Clear.
	0 25	10.5	761.60	29.931	41.	35.	3 A. M.: .154	70.5	NW.				Clear.
	2 25	9.8	761.70	29.939	36.7	33.5	(D. 25.3) .174	75.5	NW.				Clear.
	4 25	9.	762.00	29.953	33.9	31.5	.172	85.	W. by S.				Clear.
	6 25	8.5	762.50	29.975	31.5	29.8	9 A. M.: .167	89.5	W. by S.			7	Ci., Ci.-s. from W.
	8 25	8.2	762.20	29.965	34.6	32.6	(D. 30.4) .181	89.	W. by S.			4	Ci., Ci.-cu.
	10 25	8.8	763.00	29.954	43.5	38.5	(A. 37.5) .195	78.	S. by E.			5	Ci., Ci.-cu., S. from W.
	12 25	10.	760.40	29.886	47.3	40.6	3 P. M.: .190	72.	SE. by S.			3	Ci., Ci.-s.
	14 25	11.2	758.90	29.822	50.7	42.7	(D. 29.2) .200	68.5	SSE.			2	Light Ci., Ci.-s, Cu.-s.
15	16 25	11.2	758.00	29.786	46.8	40.3	(A. 48.) .194	71.	SE. by S.	1		8	Ci., Ci.-cu., Ci.-s, N.
	18 25	11.	757.70	29.777	44.3	39.8	.213	78.5	E. by S.			8	N.
	20 25	10.4	755.70	29.700	42.4	38.4	.225	81.	ENE.			8	N.
	22 25	10.3	755.00	29.593	48.	46.	.304	87.5	E.	1	.15	8	N., raining hard.

Day.	Date.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gausse's.	Wind.		Rain, inches.	Sky covered, Sths.	Clouds, &c
		Temperat., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
16	h. m.													
	0 25	6.7	757.65	29.795	33.9	29.5	.138	3 A. M.: (D. 19.)	76.	NW.	..	..	8	Cu., N. from W.
	2 25	5.9	758.25	29.822	31.5	28.5	.146		79.1	NW.	..	..	8	Cu., Cu-s.
	4 25	5.5	758.60	29.837	31.	28.7	.154		83.3	NW.	..	..	8	Cu., N. from W.
	6 25	5.3	759.15	29.859	31.5	29.7	.166	9 A. M.: (D. 24.)	85.7	NW.	..	..	8	Cl., Ci cu., Cu., Cu s. from W.
	8 25	6.	760.00	29.890	34.7	31.9	.171	(A. 36.)	83.	NW.	..	..	8	Ci-cu., Cu-s., Ci-s. from W.
	10 25	6.	760.10	29.894	37.7	32.1	.137	3 P. M.: (D. 24.)	74.	W.	..	..	8	Ci., Ci-cu., Ci-s., Cu-s.
	12 25	6.4	759.00	29.848	39.6	33.5	.141	(D. 24.)	72.	W.	..	..	4	Cl., Cu., Ci-cu., Ci-s.
	14 25	6.6	758.40	29.824	40.	33.8	.142	(D. 24.)	70.5	W.	..	..	8	Cu., Ci-cu., Ci-s. from W.
	16 25	7.4	759.00	29.843	38.9	31.9	.129	(A. 39.5)	70.	W.	..	..	6	Ci cu., Ci-s., S., Cu. from W.
	18 25	6.8	760.00	29.886	33.5	29.5	.143	9 P. M.: (D. 29.5)	75.5	W.	..	..	..	Ci-cu., S. in NNE.
	20 25	6.3	760.45	29.908	31.2	28.3	.146		80.5	W.	..	..	..	Ci. in SW, S. in NW.
17	22 25	5.7	760.60	29.916	39.	27.5	.155		85.	W.	..	..	..	Clear.
	0 25	5.1	760.50	29.914	38.	26.	.141	3 A. M.: (D. 20.5)	86.	W.	..	..	..	Clear.
	2 25	4.4	760.60	29.921	27.5	25.5	.138		86.	W.	..	..	..	Clear.
	4 25	3.9	760.60	29.924	25.	24.	.139		90.2	SW by W	..	..	..	Clear.
	6 25	3.7	760.60	29.925	27.4	25.5	.139	9 A. M.: (D. 25.5)	86.9	SW by W.	..	..	8	N., Cu., Ci-cu., S.
	8 25	4.1	760.80	29.931	...	...	...		...	SW.	..	..	..
	10 25	5.	760.15	29.900	38.4	32.	.135	(A. 35.7)	75.	SW.	..	..	3	Cl., Ci-cu., S.
	12 25	6.	759.25	29.860	40.5	35.	.160	3 P. M.: (D. 27.8)	72.5	SW.	1	..	8	Ci-cu., S.
	14 25	7.	758.40	29.823	41.7	36.7	.179	(D. 27.8)	74.5	SW.	1	..	6	Cu., Ci-cu., Cu-s. from W.
	16 25	7.	758.10	29.811	40.	35.5	.175	(A. 41.)	77.	SW.	..	..	8	Cl., Ci-cu., Cu-s.
	18 25	7.5	758.50	29.824	37.7	35.3	.197	9 P. M.: (D. 30.)	87.	SSW.	..	..	3	Cu., Ci-cu.
	20 25	7.	758.75	29.837	33.6	22.6	.193		92.	SSW.	..	..	1	Ci-cu. in S.
	22 25	6.5	758.50	29.828	32.3	31.6	.189		95.	SSW.	..	..	2	Ci-cu., S., (?) dark.

(1860.

DAILY METEOROLOGICAL OBSERVATIONS.

November.]

Date.	Hour.	Barometer.			Therm'n, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr. Measurements.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, centigrade.	Old height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
18	h. m.													
	0 25	6.8	758.80	29.819	32.6	31.6	.186	3 A. M.: (D. 39.)	90.5	SSW.	..	..	4	Cu., Ci-cu., S.
	2 25	5.5	758.55	29.835	32.4	31.5	.187		91.5	NW.	..	..	8	Very dark.
	4 25	5.8	758.65	29.846	33.5	31.5	.176		86.8	NNW.	..	..	8	N., snowing fast.
	6 25	5.9	758.80	29.824	32.8	31.6	.186	9 A. M.: (D. 37.)	83.3	NNW.	..	..	8	N., snowing fast.
	8 25	5.4	758.25	29.824	29.6	29.3	.178	(D. 31.)	93.	NNE.	..	..	8	N., snowing.
	10 25	5.	756.80	29.768	30.3	29.6	.178	(A. 31.)	93.	NNE.	..	..	8	N., snowing.
	12 25	5.6	756.00	29.695	30.6	29.9	.178	3 P. M.: (D. 28.)	90.	NNE.	..	..	8	N., snowing gently.
	14 25	5.5	752.70	29.606	30.4	29.9	.180	(A. 31.)	93.	NNE.	..	..	8	N., snowing gently.
	16 25	5.3	751.75	29.568	30.3	29.9	.181	9 P. M.: (D. 28.)	90.8	N.	..	..	8	N., snowing gently.
	18 25	5.1	751.90	29.575	29.9	29.7	.182		93.	NNW.	..	..	8	N., snowing gently.
	20 25	5.	752.00	29.579	29.8	29.1	.173		92.5	NNW.	..	..	8	N., snowing gently.
	22 25	4.6	752.20	29.589	29.6	29.3	.178		93.	NW.	..	..	8	Snowing.
	0 25	4.3	752.70	29.611	30.	29.6	.179	3 A. M.: (D. 27.9)	89.9	NW.	..	..	8	Cu., Ci-cu., Cu-s.
	2 25	3.8	753.00	29.624	30.9	29.9	.175		84.5	NW.	..	..	1	N., Cu-s, S.
	4 25	4.7	753.30	29.632	29.7	28.3	.161	9 A. M.: (D. 25.4)	77.	WNW.	..	..	4	Ci., Ci-cu., Cu-s.
	6 25	3.6	753.80	29.657	31.5	29.5	.162	(A. 32.8)	77.5	W. by N.	..	..	4	Ci., Ci-cu. from NW.
	8 25	3.6	754.75	29.695	30.8	29.5	.169	3 P. M.: (D. 29.6)	78.	W. by N.	..	..	5	Ci-cu., N., Cu-s. from NW.
	10 25	4.7	755.20	29.707	34.8	32.6	.180		80.	WNW.	2	..	8	N., Cu-s, Ci-s.
	12 25	6.	755.10	29.697	36.2	32.9	.169		87.	NW.	..	..	8	N., snowing lightly.
	14 25	5.7	755.40	29.710	34.7	32.7	.182	(A. 34.7)	87.5	W. by N.	..	..	8	N., snowing lightly.
	16 25	5.5	756.40	29.750	34.5	32.7	.184		79.	W.	..	..	8	Ci., Ci-cu., Ci-s, N.
	18 25	5.6	757.15	29.780	35.9	32.3	.161		79.5	W.	..	..	2	Dark, probably N.
	20 25	5.5	758.00	29.813	34.9	31.5	.162		80.	W.	..	..	8	
	22 25	5.6	758.90	29.849	35.	31.6	.162				..	..

Date.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
20	h m.													
	0 25	5.2	*758.65	29.841	35.6	32.	.163	3 A. M.: (D. 25.3)	88.7	NW.	1		2	Cu., N.
	2 25	5.2	759.30	29.866	35.2	31.7	.162	(D. 25.3)	80.1	NW.			2	Cu., N.
	4 25	5.5	760.00	29.892	35.5	32.2	.164		81.9	NW by W.			8	Cu., N.
	6 25	5.9	760.90	29.927	36.6	32.	.163	9 A. M.: (D. 23.2)	76.1	NW.			8	Cu., N. and S.
	8 25	5.5	761.70	29.959	36.7	30.7	.130	(D. 23.2)	70.	NW.	1		2	Ci-cu., Cu-s.
	10 25	6.2	762.40	29.983	37.2	31.2	.134	(A. 37.)	68.	NW.	2			Ci-cu. around Hor.
	12 25	6.7	762.50	29.985	38.8	32.6	.134	3 P. M.: (D. 25.)	69.	NW.				Ci-cu., Cu. from NW.
	14 25	8.	762.75	29.988	40.	34.	.148	(D. 25.)	69.	NW.				Clear.
	16 25	7.6	763.00	30.000	39.1	33.1	.139	(A. 40.4)	68.5	WNW.			3	Ci., Ci-cu., Cu-s. from NW.
	18 25	8.3	764.00	30.036	35.	31.	.152	9 P. M.: (D. 19.)	74.2	WNW.				Clear.
	20 25	7.2	764.30	30.053	32.7	29.3	.157	(D. 19.)	77.	W.				Clear.
21	22 25	6.5	765.30	30.096	30.8	27.8	.142		79.	W.				Clear.
	0 25	5.5	765.25	30.098	28.6	26.6	.144	3 A. M.: (D. 24.5)	84.	N. by E.				Clear.
	2 25	5.1	765.70	30.118	27.5	26.	.148	(D. 24.5)	87.2	N. by E.				Clear.
	4 25	4.4	765.50	30.113	24.4	23.6	.139	(A. 26.)	93.9	N. by E.				Clear.
	6 25	4.3	766.15	30.140	23.5	23.5	.147	9 A. M.: (D. 25.)	95.9	N. by E.				Clear.
	8 25	4.8	767.10	30.175	29.2	28.4	.167	(D. 25.)	92.	N. by E.				Ci., Ci-cu.
	10 25	4.5	767.60	30.172	26.1	31.8	.154	(A. 30.6)	80.	N. by E.			8	Ci-cu., S.
	12 25	5.3	766.00	30.129	38.6	34.2	.165	3 P. M.: (D. 23.)	76.	W.			8	Ci-cu., N., Cu-s.
	14 25	6.8	765.50	30.102	39.8	35.3	.173	(D. 23.)	74.5	SW.			6	Ci-cu., N., Cu-s.
	16 25	6.8	765.20	30.090	37.5	33.2	.159	(A. 34.)	75.5	SW.			4	Ci-cu., Ci-s., Cu-s.
	18 25	7.3	766.00	30.120	36.	32.7	.167	9 P. M.: (D. 27.3)	80.4	E. by N.			8	Ci., Ci-cu., Cu-s.
	20 25	7.5	766.15	30.125	33.6	31.8	.180	(D. 27.3)	84.6	E. by N.			1	Dark.
	22 25	7.	764.55	30.065	31.5	30.5	.179	(A. 32.6)	91.4	E.			1	Cu-s.

* Previous to this time, the temperature of the air recorded with the dew point is that given by the thermometer attached to the instrument. This, however, has been rejected in all the night observations, because the observer's lamp in many cases evidently affected the thermometer. From November 21, 1840, the *tempera-* ture of the air is that given by the observatory standard thermometer

1890.

DAILY METEOROLOGICAL OBSERVATIONS.

November.]

Day.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Centesimal.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperatures,	Old height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
23	0 25	12.8	747.85	29.379	58.5	57.3	.465	3 A. M.: (D. 56.5)	93.5	SW.	..	.04	8	N., light rain.
	2 25	13.6	748.35	29.394	59.	58.5	.493	(A. 56.5)	93.6	SW. by W.	..	..	8	N., light rain.
	4 25	14.5	748.25	29.386	58.5	57.5	.470	9 A. M.: (A. 56.6)	90.5	WSW.	..	..	8	N.
	6 25	14.7	749.00	29.414	56.6	55.5	.449	9 A. M.: (D. 54.)	91.2	SW.	..	..	8	N.
	8 25	14.7	749.15	29.420	55.5	55.	.437	(D. 54.)	92.9	SW.	..	..	8	N.
	10 25	15.4	749.25	29.420	56.	53.7	.398	(A. 57.3)	89.	WNW.	..	..	8	Cl.-cu., N., Cu s.
	12 25	15.3	750.25	29.461	53.	48.	.294	3 P. M.: (A. 41.5)	79.	NW.	2	..	8	Cu., Cl.-cu., and N. from NNW.
	14 25	14.7	752.60	29.557	51.	45.	.247	(D. 41.5)	74.5	NW.	2	..	8	Cl.-cu., Cu., N. from NW.
	16 25	13.7	755.00	29.656	46.2	39.5	.185	(A. 49.8)	70.	WNW.	3	..	7	Cl.-cu., Cu. from W.
	18 25	12.3	757.75	29.772	44.	37.8	.175	9 P. M.: (D. 31.)	70.	WNW.	1	..	1	Cu., N.
	20 25	11.5	759.65	29.810	42.7	36.7	.168	(D. 31.)	70.	WNW.	..	..	1	Cl., Cu.
	22 25	10.7	759.85	29.862	40.5	35.5	.170	(A. 42.)	72.	WNW.	..	..	2	Cl.-cu. (?) in N.
24	0 25	10.	761.10	29.913	40.1	35.4	.172	3 A. M.: (D. 38.2)	73.5	NW.	..	..	..	Clear.
	2 25	9.5	762.25	29.961	37.	33.	.162	(D. 38.2)	75.8	NW.	..	..	..	Clear.
	4 25	8.9	763.75	29.984	34.8	31.6	.164	(A. 36.)	79.	NW.	..	..	..	S. and Cl.-s. around Hor.
	6 25	8.9	763.95	30.081	33.6	31.2	.170	9 A. M.: (D. 32.)	84.1	NW.	..	..	..	Cu.-s. in W.
	8 25	8.2	764.40	30.052	37.8	33.8	.167	(D. 32.)	78.5	NW.	..	..	..	Clear, little hazy.
	10 25	8.8	765.00	30.072	41.	36.	.172	(A. 40.2)	75.5	NW.	..	..	..	Cu., Cl.-cu., Cl.-s. from SW.
	12 25	10.3	764.90	30.062	44.5	38.	.173	3 P. M.: (D. 30.4)	73.	NW.	..	..	..	Cl., Cu., Cl.-cu.
	14 25	11.3	764.40	30.037	45.2	39.2	.189	(D. 30.4)	71.	WSW.	..	..	..	Cl., Cl.-s., Cl.-cu.
	16 25	11.5	764.40	30.036	43.3	37.8	.183	(A. 45.2)	71.1	WSW.	..	..	..	Light Cl.-s. in Hor.
	18 25	10.9	765.00	30.063	39.	34.9	.175	.....	77.	W. by N.	..	..	..	Cl., Cl.-s.
	20 25	10.3	765.40	30.081	37.3	33.5	.167	.....	77.5	W. by N.	..	..	..	Cl., Cl.-s.
	22 25	9.3	764.80	30.063	35.	33.9	.182	.....	87.9	W. by N.	..	..	..	Cl., Cl.-cu., Cl.-s.

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr, Saussure's.	Wind.		Rain, inches.	Sky covered, eths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
26	a. m.													
	0 25	9.2	764.15	30.037	34.8	32.6	.179	3 A. M.: (D. 30.9)	88.9	W. by N.	..	..	8	Overcast.
	2 25	8.3	763.95	30.033	35.	38.5	.193	(A. 34.)	90.1	W. by N.	..	..	8	Overcast, N.
	4 25	8.4	764.50	30.055	34.	32.9	.194	9 A. M.: (D. 29.)	91.9	N.	..	..	8	N.
	6 25	8.9	761.95	29.953	34.8	33.	.187	9 A. M.: (D. 29.)	87.9	N.	..	..	8	N.
	8 25	8.	761.60	29.949	37.6	34.9	.191	(D. 29.)	84.	N.	..	..	8	N.
	10 25	7.6	761.15	29.927	40.7	37.	.196	(A. 40.3)	81.5	NE.	..	..	8	N.
	12 25	8.	759.00	29.840	42.4	39.	.216	3 P. M.: (D. 35.)	83.	NE.	..	..	8	N.
	14 25	8.2	757.00	29.761	41.5	39.2	.231	(D. 35.)	86.5	NE.	..	..	8	N.
	16 25	8.5	756.30	29.731	40.2	39.2	.245	(A. 42.5)	93.	NE.	..	..	8	N.
	18 25	8.6	755.20	29.698	38.	37.1	.229	9 P. M.: (D. 34.)	93.6	NE.	..	.08	8	N.
	20 25	7.6	754.00	29.646	34.6	34.2	.211	(D. 34.)	96.	N.	..	.10	8	N.
	22 25	8.	753.50	29.628	31.4	33.	.191	(A. 34.6)	94.5	N.	..	.12	8	N.
	0 25	7.7	753.00	29.606	34.	33.5	.204	3 A. M.: (D. 32.1)	94.1	NW.	..	..	8	N.
	2 25	7.5	753.00	29.607	35.4	34.	.198	(D. 32.1)	90.	NW.	..	..	8	N.
	4 25	7.1	753.25	29.619	36.6	34.4	.193	(A. 35.7)	85.8	NW.	..	..	8	N.
	6 25	6.8	754.50	29.671	36.5	34.3	.192	9 A. M.: (D. 33.)	83.1	NW.	..	..	8	N.
	8 25	7.	755.25	29.699	37.	34.	.180	(A. 39.)	82.	NW.	..	..	3	N.
	10 25	7.	756.00	29.728	39.2	34.4	.163	(D. 33.)	74.	NW.	1	..	3	N.
	12 25	8.	755.00	29.683	40.7	35.7	.171	..	72.	WNW.	1	..	7	N.
	14 25	8.	754.70	29.672	40.3	35.7	.176	..	75.	WNW.	1	..	7	N.
	16 25	8.1	755.75	29.713	37.9	34.	.170	..	75.	WNW.	..	..	7	N.
	18 25	8.	756.70	29.750	33.3	32.9	.202	..	90.	WNW.	..	..	8	N.
	20 25	7.3	756.70	29.754	33.5	32.8	.197	..	92.	W.	..	..	8	N.
	22 25	6.9	757.00	29.763	33.4	32.	.185	..	89.9	W.	..	..	8	N.

November.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1866.]

Day.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gannett's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. pointer.	Force, lbs.			
27	A. m.													
	0 25	6.7	757.15	29.775	32.6	32.	.193	3 A. M.: (D. 36.9)	89.9	NW.			8	N., moving.
	2 25	6.	758.05	29.813	32.6	32.	.198	(A. 36.5)	88.1	NW.	1		8	N., moving.
	4 25	6.3	759.05	29.850	32.3	32.9	.161		83.9	NW.	1		1	N.
	6 25	5.	761.05	29.935	31.2	28.9	.155		81.1	NW.	1		3	N.
	8 25									NNW.	1			
	10 25									NW.	1			
	12 25									NNW.	2			
28	14 25									NNW.	1			
	16 25	5.8	764.70	30.076	34.6	32.	.173		73.	NW.	1			
	18 25	6.8	765.45	30.100	31.3	31.	.189	9 P. M.: (D. 28.)	77.5	NW.	1		4	Cl., Cl-4.
	20 25	6.1	766.30	30.137	30.7	30.2	.163	(A. 30.)	81.5	W. by N.			1	Cl., S.
	22 25	6.6	766.30	30.140	29.9	27.2	.141			W. by N.				Clear.
	0 25	5.1	766.40	30.106	28.6	26.7	.146	3 A. M.: (D. 32.1)	88.8	W.			1	Cl-4.
	2 25	6.2	766.00	30.125	28.	26.4	.147	(A. 36.)	84.5	W.				
	4 25	5.9	766.10	30.121	27.2	25.6	.143		84.	W.				Thin N.?
	6 25	5.	766.25	30.140	28.	26.	.141	9 A. M.: (D. 20.6)	83.8	W.			8	Cl-4. and thin N.
	8 25	5.3	766.46	30.147	31.4	28.3	.144	(A. 31.4)	79.5	WSW.			8	Cl-ca., Cu. from NW.
	10 25	5.8	766.90	30.127	37.1	31.9	.146		77.5	SSW.			7	Cu., Cl., Cl-ca. from SW.
	12 25	6.5	764.30	30.057	41.2	35.6	.162	3 P. M.: (D. 33.5)	72.2	SSW.	1		2	Cl., Cl-4. from SW.
	14 25	8.	763.10	30.001	44.	35.8	.135	(A. 44.)	70.	SW.	1		1	Cl-ca., Cl. from SW.
	16 25	9.6	763.00	29.989	40.4	36.1	.181	(D. 36.9)	75.	SW.			2	Cl., Cl-ca., Cl-4. near Hor.
	18 25	8.4	763.10	29.999	39.5	35.2	.174	9 P. M.: (A. 35.3)	76.8	SW.			8	N., S., N.
	20 25	7.9	763.20	30.006	36.	33.5	.162		84.2	SW.			2	Cu., S., N.
	22 25	7.2	763.85	30.096	33.9	32.	.120		87.	SW.			1	Cu.

November.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1940.

[28]

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Date.	Barometer.				Therm'n, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, Sths.	Clouds, &c.
	Temp'ture, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Dir. points.				Force, Hrs.				
30	A.													
0	25	9.7	756.90	29.750	47.	42.5	.238	3 A. M.:	79.	S.	.	.	8	N.
2	25	9.6	756.65	29.740	46.	42.	.238	(D. 38.3)	79.	S.	.	.	8	N.
4	25	9.5	756.50	29.735	45.9	41.9	.237	(A. 47.3)	79.5	S.	.	.	8	N.
6	25	9.5	756.55	29.737	45.5	41.6	.236	9 A. M.:	81.1	S.	.	.	8	N.
8	25	10.	756.40	29.728	47.4	42.7	.238	(D. 36.8)	79.	S.	.	.	8	Cl-cu., N.
10	25	10.	756.30	29.724	49.5	44.2	.247	(A. 47.5)	78.	S.	.	.	8	N., S.
12	25	10.5	754.75	29.662	53.6	47.3	.269	3 P. M.:	75.	SSW.	.	.	8	Cl., Cl-c., N.
14	25	11.4	754.00	29.628	53.7	46.5	.251	(D. 39.)	74.	SW.	.	.	6	Cl., Cl-c.
16	25	12.	754.00	29.625	52.3	46.2	.260	(A. 54.)	75.	SW.	.	.	4	Cl., Cl-c.
18	25	12.3	756.16	29.708	51.4	43.8	.218	.....	72.	W.	.	.	1	Thin hazy clouds in SW.
20	25	11.5	769.15	29.880	48.	36.5	.106	.....	52.	WNW.	.	.	1	Very clear in N., hazy in S.
22	25	10.4	762.85	29.961	38.9	30.7	.107	.....	59.	NW.	.	.	3	Clear, a few light clouds in S. Hor.

DAILY METEOROLOGICAL OBSERVATIONS

Downing.

Day.	Hour.	Temperature.			Barometer.			Therm. Feb.		Force of wind, lbs.	Bar. point, Feb.	Hygt., Sea level.	Wind.		Rain, inches.	Sky covered, etc.	Clouds, &c.
		Surface.	Atmos.	Wind.	Obs'd height.	Corr. height.	Bar.	Dry.	Wet.				Dir.	Force, lbs.			
1	0	3.7	764.25	30.044	32.9	35.9	8 A. M.: (D. 20.)	60.8	NW.	8	60.8	60.8	NW.	..	..	..	Cl. cu.
	2	7.3	765.30	30.093	32.9	33.5	(A. 29.)	64.5	NW.	..	64.5	64.5	NW.	..	..	..	Light N.
	4	25	765.60	30.109	37.8	33.1	9 A. M.: (D. 15.2)	69	NW. by W.	..	69	69	NW. by W.	..	..	..	Light N. and S.
	6	25	766.90	30.164	37.8	33.5	9 A. M.: (D. 15.2)	74.1	W.	..	74.1	74.1	W.	..	..	..	N., Cu.-s., and S.
	8	25	767.70	30.197	38.5	35.5	3 P. M.: (D. 17.3)	70.5	NW.	..	70.5	70.5	NW.	..	..	..	N., Cu.-s., and S.
	10	25	768.15	30.200	39.6	37.	3 P. M.: (D. 17.3)	70.	NW.	..	70.	70.	NW.	..	..	..	Cl., Cl.-cu., Cu.-s., N.
	12	25	766.90	30.168	31.	29.2	9 P. M.: (A. 32.2)	69.5	SW.	..	69.5	69.5	SW.	..	..	..	Cl., Cu.-s. in S.
	14	25	766.85	30.169	32.3	26.8	9 P. M.: (D. 18.)	72.	SSW.	..	72.	72.	SSW.	..	..	..	Cl.-s., Cu.-s. in S.
	16	25	767.60	30.188	36.	26.4	9 P. M.: (D. 18.)	76.	SSW.	..	76.	76.	SSW.	..	..	..	Clear.
	18	25	768.45	30.197	36.8	24.4	3 A. M.: (A. 24.)	83.5	SSW.	..	83.5	83.5	SSW.	..	..	..	Clear.
	20	25	768.65	30.197	35.5	22.5	3 A. M.: (D. 19.)	92.2	S. by E.	..	92.2	92.2	S. by E.	..	..	..	Clear.
2	0	25	768.50	30.206	32.	22.	3 A. M.: (D. 19.)	93.8	S. by E.	..	93.8	93.8	S. by E.	..	..	..	Clear.
	2	25	768.70	30.250	30.9	20.5	9 A. M.: (D. 20.)	93.	S. by E.	..	93.	93.	S. by E.	..	..	..	Clear.
	4	25	769.25	30.272	19.4	19.	9 A. M.: (D. 20.)	94.1	E.	..	94.1	94.1	E.	..	..	..	Hazy.
	6	25	769.50	30.286	19.	18.6	3 A. M.: (A. 26.4)	84.	SSE.	..	84.	84.	SSE.	..	..	..	Very hazy in Hor.
	8	25	770.00	30.307	22.5	21.5	3 P. M.: (D. 22.)	74.	SSW.	..	74.	74.	SSW.	..	..	..	Slightly hazy.
	10	25	770.50	30.323	30.3	28.3	3 P. M.: (A. 36.5)	71.	SW.	..	71.	71.	SW.	..	..	..	Clear.
	12	25	769.70	30.286	34.7	32.3	9 P. M.: (D. 17.)	86.	SW.	..	86.	86.	SW.	..	..	..	Hazy.
	14	25	769.00	30.251	37.	32.3	9 P. M.: (A. 36.5)	87.1	SW.	..	87.1	87.1	SW.	..	..	..	Clear.
	16	25	768.85	30.240	34.2	29.7	9 P. M.: (A. 36.5)	81.3	SSW.	..	81.3	81.3	SSW.	..	..	..	Cl., Cl.-cu. in W.
	18	25	769.00	30.248	30.6	27.1	9 P. M.: (A. 36.5)	81.3	SSW.	..	81.3	81.3	SSW.	..	..	..	Light S. in Hor., hazy
	20	25	769.00	30.250	28.5	26.				..				..	..	..
	22	25	768.65	30.240	28.5	26.				..				..	..	..

* Snow of 5th and 6th not properly noted. Amount recorded at the Pennsylvania Hospital, 2.0 inches of water. Rain of 31st, also lost, recorded at Hospital, 1.25 inches.

Day.	Hour.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., saturation.	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
			Temp., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
3	h.														
	0	25	4.	768.00	30.214	26.9	25.4	.142	3 A. M.:	87.	SSW.	..	..	..	Light clouds in Hor.
	2	25	3.5	768.16	30.222	26.4	25.5	.149	(D. 24.1)	94.1	S. by W.	..	..	1	Light clouds in Hor.
	4	25	2.9	767.48	30.196	25.8	25.	.147	(A. 25.7)	94.	S. by W.	..	..	8	Cu., Cu-a.
	6	25	3.1	767.48	30.197	26.5	26.	.156	9 A. M.:	95.5	S. by W.	..	..	8	Cu., Ci cu., Cu-a.
	8	25	3.	768.30	30.231	28.3	27.4	.160	(D. 27.)	93.	S. by W.	..	..	..	Very light cloud in Hor.
	10	25	4.4	768.75	30.242	27.3	24.	.176	(A. 24.5)	86.	W. by N.	..	..	7	Very light cloud in Hor.
	12	25	5.5	767.50	30.187	25.5	28.	.195	3 P. M.:	74.	NW. by N.	..	..	7	Ci., Ci-a., Cu-a.
	14	25	6.9	767.40	30.177	25.	28.5	.177	(D. 26.8)	69.5	N. by E.	..	..	8	Ci., Ci-a., Cu-a.
	16	25	8.	768.15	30.201	28.1	28.5	.161	(A. 45.5)	69.	N. by E.	..	..	8	Ci., Ci-a.
	18	25	8.9	768.45	30.246	28.5	31.8	.153	.....	73.	N. by E.	..	..	..	Clear.
	20	25	7.2	769.90	30.270	26.1	31.8	.154	.....	71.	N. by E.	..	..	..	Clear.
4	22	25	6.7	771.10	30.311	25.5	31.2	.150	.....	76.	N. by E.	..	..	..	Clear.
	0	25	6.	771.25	30.329	25.7	30.	.148	3 A. M.:	78.	NE.	..	..	..	Clear.
	2	25	6.	773.05	30.363	21.5	28.	.137	(D. 20.)	79.	NE.	..	..	..	Clear.
	4	25	6.2	772.25	30.371	20.	26.	.120	(A. 31.1)	77.1	NE.	..	..	..	Clear.
	6	25	4.4	773.15	30.415	26.8	23.5	.114	.....	79.	ENE.	..	..	8	N., Ci-cu., S., Ci-a.
	8	25	3.3	774.15	30.469	26.3	23.7	.123	.....	75.	ENE.	1	..	8	Ci-cu., S., Ci-a.
	10	25	3.4	774.00	30.453	26.1	22.6	.106	.....	71.	NE.	1	..	8	N., Ci-a.
	12	25	3.	773.55	30.437	27.	21.5	.093	.....	66.5	NE.	1	..	8	N.
	14	25	2.4	772.80	30.410	27.	21.6	.082	.....	68.	ENE.	1	..	8	N.
	16	25	1.7	772.40	30.398	25.1	22.1	.109	.....	74.5	ENE.	1	..	8	N., snowing.
	18	25	1.1	772.20	30.398	23.	22.3	.133	9 P. M.:	86.3	ENE.	1	..	8	N., snowing.
	20	25	1.	771.50	30.367	22.	21.6	.132	(D. 19.1)	92.	NE.	1	..	8	N., snowing.
	22	25	0.7	771.00	30.343	20.3	20.	.126	(A. 32.)	92.	NNE.	2	..	8	N., snowing.

December.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840

Day.	Hour.	Barometer.			Therm°s, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Samson's.	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
		Temperature, centigrade.	Obs'd heights, millimetres.	Corr. heights, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
5	A.													
	0 25	0.2	769.65	30.286	19.	18.6	.119	3 A. M.:	92.	NNE.	1	.	8	N., snowing fast.
	2 25	-0.2	769.46	30.290	18.7	18.5	.130	(D. 17.5)	93.	NNE.	2	.	8	N., snowing fast.
	4 25	1.	768.90	30.275	19.5	18.4	.125	(A. 19.3)	92.	NNE.	2	.	8	N., snowing fast.
	6 25	1.2	768.65	30.265	19.5	19.2	.122	9 A. M.:	92.	NNE.	2	.	8	N., snowing fast.
	8 25	-1.5	768.79	30.269	21.6	20.6	.132	(D. 15.4)	86.	NE.	2	.	8	N., snowing fast.
	10 25	-1.5	768.75	30.271	24.2	23.8	.139	(A. 22.7)	84.	NE.	3	.	8	N., snowing fast.
	12 25	-0.5	767.75	30.228	25.6	24.	.133	.....	80.5	NE.	3	.	8	N., snowing fast.
	14 25	-0.5	767.45	30.214	23.6	24.3	.139	.....	78.	NE.	3	.	8	N., snowing fast.
	16 25	0.0	768.10	30.236	25.5	24.	.134	.....	77.	NE.	2	.	8	N., snowing fast.
7	0 25	0.0	769.40	30.250	24.5	23.	.129	9 P. M.:	75.3	NE.	2	.	8	N., ceased snowing.
	2 25	1.	768.10	30.243	23.1	20.1	.099	(D. 17.6)	75.	ENE.	2	.	8	N.
	4 25	-1.3	768.05	30.242	21.9	19.5	.102	(A. 22.3)	73.1	ENE.	2	.	8	N.
	6 25	-1.1	762.60	30.026	25.9	24.5	.138	3 A. M.:	86.	NW.	2	.	8	N.
	8 25	-1.3	763.80	30.074	23.4	21.	.150	(D. 16.3)	84.	NW.	2	.	1	Ch-ca., Cl-a.
	10 25	-1.6	765.35	30.128	23.	21.5	.122	(A. 21.)	81.9	NW.	2	.	1	S., Cl-a.
	12 25	-1.6	765.85	30.157	21.6	20.8	.127	9 A. M.:	81.9	NW.	2	.	8	N.
	14 25	-1.5	767.30	30.209	21.7	19.9	.116	(D. 17.5)	80.	NW.	2	.	4	Cl., Cl-ca., Cu a.
	16 25	-1.3	768.00	30.240	23.3	21.3	.116	(A. 22.4)	79.	NW.	2	.	4	Clear.
	18 25	0.8	768.15	30.236	25.8	23.8	.128	3 P. M.:	77.	NW.	2	.	4	Light Cl. in S.
9	0 25	1.7	768.25	30.235	28.1	24.9	.121	(D. 15.4)	75.5	NW.	2	.	4	Light Cl. in S.
	2 25	1.9	769.00	30.263	26.6	24.2	.126	(A. 22.4)	75.	NW.	2	.	4	Heavy.
	4 25	1.8	769.55	30.286	23.5	21.1	.121	9 P. M.:	84.7	NW.	2	.	4	Clear.
	6 25	0.9	769.65	30.295	18.	17.5	.113	(D. 11.9)	90.	NW.	2	.	4	Cl-a.
11	0 25	0.2	769.35	30.286	15.7	15.5	.107	(A. 17.)	94.	NW.	2	.	1	Cl-a.

Day.	Hour.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c
			Temperat're,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
16	0	25	6.7	757.65	29.795	33.9	29.5	.138	3 A. M.: (D. 19.)	76.	NW.	..	..	8	Cu., N. from W.
	2	25	5.9	758.25	29.822	31.5	28.5	.146	(D. 19.)	79.1	NW.	..	..	8	Cu., Cu-a.
	4	25	5.5	758.60	29.837	31.	28.7	.154	9 A. M.:	83.3	NW.	..	..	8	Cu., N. from W.
	6	25	5.3	759.15	29.859	31.5	29.7	.166	9 A. M.:	85.7	NW.	..	..	8	Cl., Ci cu., Cu., Cu a. from W.
	8	25	6.	760.00	29.890	34.7	31.9	.171	(D. 24.)	83.	NW.	..	..	8	Ci-cu., Cu-a., Ci-a. from NW.
	10	25	6.	760.10	29.894	37.7	32.1	.137	(A. 36.)	74.	W.	..	..	8	Ci., Ci-cu., Ci-a., Cu-a.
	12	25	6.4	759.00	29.848	39.6	33.5	.141	3 P. M.:	72.	W.	..	..	4	Cl., Cu., Ci-cu., Ci-a.
	14	25	6.6	758.40	29.824	40.	33.8	.142	(D. 24.)	70.5	W.	..	..	8	Cu., Ci-cu., Ci-a. from W.
	16	25	7.4	759.00	29.843	38.9	31.9	.129	(A. 39.5)	70.	W.	..	..	6	Ci-cu., Ci-a., S., Cu. from W.
	18	25	6.8	760.00	29.886	33.5	29.5	.143	9 P. M.:	75.5	W.	..	..	..	Ci-cu., S. in NNE.
17	20	25	6.3	760.45	29.905	31.2	28.3	.146	(D. 29.5)	80.5	W.	..	..	..	Ci. in SW, S. in NW.
	22	25	6.7	760.60	29.916	39.	27.5	.155	.....	85.	W.	..	..	..	Clear.
	0	25	5.1	760.50	29.914	38.	26.	.141	3 A. M.:	86.	W.	..	..	..	Clear.
	2	25	4.4	760.60	29.921	27.5	25.5	.138	(D. 20.5)	86.	W.	..	..	..	Clear.
	4	25	3.9	760.60	29.924	25.	24.	.139	.....	90.2	SW by W	..	..	..	Clear.
	6	25	3.7	760.60	29.925	27.4	25.5	.139	9 A. M.:	86.9	SW by W.	..	..	8	N., Cu., Ci-cu., S.
	8	25	4.1	760.60	29.931	....	....	....	(D. 25.5)	....	SW.	..	..	3	Cl., Ci-cu., S.
	10	25	5.	760.15	29.900	38.4	33.	.135	(A. 35.7)	75.	SW.	..	..	3	Ci-cu., S.
	12	25	6.	759.25	29.860	40.5	35.	.160	3 P. M.:	72.5	SW.	..	..	8	Cu., Ci-cu., Cu-a. from W.
	14	25	7.	768.40	29.833	41.7	36.7	.179	(D. 27.6)	74.5	SW.	..	..	8	Ci., Ci-cu., Cu-a.
	16	25	7.	768.10	29.811	40.	35.5	.175	(A. 41.)	77.	SW.	..	..	3	Cu., Ci-cu.
	18	25	7.5	758.50	29.824	37.7	35.3	.197	9 P. M.:	87.	SSW.	..	..	3	Ci-cu. in S.
	20	25	7.	758.75	29.837	38.6	32.6	.193	(D. 30.)	93.	SSW.	..	..	1	Ci-cu., S., (?) dart.
	22	25	6.5	758.50	29.828	32.3	31.6	.199	.....	95.	SSW.	..	..	2	

[1940.]

DAILY METEOROLOGICAL OBSERVATIONS.

November.]

Day.	Hour.	Barometer.			Therm'n, Fah.		Force of vapor, lbs.	Dew point, Fah.	Hygr., Gaumme's	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
		Temperature, centigrade.	Old height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
18	h. m.													
	0 25	6.8	758.30	29.819	32.6	31.6	.186	3 A. M.: (D. 29.)	90.5	SSW.	..	..	4	Ca., Ci-cu., S.
	2 25	6.5	758.55	29.835	32.4	31.5	.187	(D. 29.)	91.5	NW.	..	..	8	Very dark.
	4 25	6.8	758.85	29.846	32.5	31.5	.176	.....	86.8	NNW.	..	..	8	Very dark.
	6 25	5.9	758.30	29.824	32.8	31.8	.188	9 A. M.: (D. 27.)	83.2	NNW.	..	..	8	N., snowing fast.
	8 25	6.4	758.35	29.824	29.6	29.3	.178	(A. 31.)	93.	NNE.	..	..	8	N., snowing fast.
	10 25	5.	758.80	29.768	30.3	29.6	.176	(D. 31.)	93.	NNE.	..	..	8	N., snowing.
	12 25	5.6	755.00	29.695	30.6	29.9	.178	3 P. M.: (D. 28.)	90.	NNE.	..	..	8	N., snowing.
	14 25	5.5	753.70	29.606	30.4	29.9	.180	(D. 28.)	93.	NNE.	..	..	8	N., snowing gently.
	16 25	5.3	751.75	29.568	30.3	29.9	.181	(A. 31.)	93.	NNE.	..	..	8	N., snowing gently.
	18 25	5.1	751.90	29.575	29.9	29.7	.182	9 P. M.: (D. 28.)	90.8	N.	..	..	8	N., snowing gently.
	20 25	5.	752.00	29.579	29.8	29.1	.173	(D. 28.)	92.	NNW.	..	..	8	N., snowing gently.
19	22 25	4.6	752.20	29.589	29.6	29.3	.178	.....	92.5	NNW.	..	..	8	N., snowing gently.
	0 25	4.3	752.70	29.611	30.	29.5	.179	3 A. M.: (D. 27.9)	93.	NW.	..	..	8	Snowing.
	2 25	3.8	753.00	29.624	30.9	29.9	.175	(D. 27.9)	89.9	NW.	..	..	8	Snowing.
	4 25	4.7	753.30	29.632	29.7	28.3	.161	.....	84.5	NW.	..	..	1	Ca., Ci-cu., Cu-s.
	6 25	3.6	753.80	29.657	29.5	29.5	.162	9 A. M.: (D. 25.4)	77.	NNW.	..	..	1	N., Cu-s., S.
	8 25	3.6	754.75	29.695	30.8	29.5	.169	(D. 25.4)	77.5	W. by N.	..	..	4	Cl., Ci-cu., Cu-s.
	10 25	4.7	755.20	29.707	34.8	32.6	.180	(A. 32.8)	78.	W. by N.	..	..	5	Cl., Ci-cu. from NW.
	12 25	6.	755.10	29.697	36.2	32.9	.169	3 P. M.: (D. 29.8)	80.	NNW.	2	..	8	Ci-cu., N., Cu-s. from NW.
	14 25	5.7	755.40	29.710	34.7	32.7	.182	(D. 29.8)	87.	NW.	..	..	8	N., Cu-s., Ci-s.
	16 25	5.5	756.40	29.750	34.5	32.7	.184	(A. 34.7)	87.5	W. by N.	..	..	8	N., snowing lightly.
	18 25	5.6	757.15	29.780	35.9	32.3	.161	.....	79.	W.	..	..	8	N.
	20 25	5.5	758.00	29.813	34.9	31.5	.162	.....	79.5	W.	..	..	2	Cl., Ci-cu., Ci-s., N.
	22 25	5.6	758.90	29.849	35.	31.6	.162	.....	80.	W.	..	..	8	Dark, probably N.

November.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

[97]

150

Date.	Hour.	Barometer.		Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.			Dir. points.	Force, lbs.			
20	4 m.												
	0 25	5.2	758.65	29.841	35.6	32.	.163	3 A. M.: 88.7	NW.			2	Cu., N.
	2 25	5.2	759.30	29.866	35.2	31.7	.162	(D. 25.3) 80.1	NW.	1		2	Cu., N.
	4 25	5.5	760.00	29.892	35.5	32.2	.164	81.9	WNW.			8	Cu., N.
	6 25	5.9	760.90	29.927	36.6	32.	.163	9 A. M.: 76.1	NW. by W.			8	Cu., N. and S.
	8 25	5.6	761.70	29.959	36.7	30.7	.130	(D. 23.2) 70.	NW.	1		2	Ci-cu., Cu-s.
	10 25	6.2	762.40	29.983	37.2	31.2	.134	(A. 37.) 68.	NW.	2			Ci-cu. around Hor.
	12 25	6.7	762.50	29.985	38.8	32.6	.134	3 P. M.: 69.	NW.	1			Ci-cu., Cu. from NW.
	14 25	8.	762.75	29.988	40.	34.	.146	(D. 25.) 69.	NW.				Clear.
	16 25	7.6	763.00	30.000	39.1	33.1	.139	(A. 40.4) 68.5	WNW.			3	Ci., Ci-cu., Cu-s. from NW.
21	18 25	8.3	764.00	30.036	35.	31.	.152	9 P. M.: 74.2	WNW.				Clear.
	20 25	7.2	764.30	30.053	32.7	29.3	.157	(D. 19.) 77.	W.				Clear.
	22 25	6.5	765.30	30.096	30.8	27.8	.142	79.					Clear.
	0 25	6.5	765.25	30.098	28.6	26.6	.144	3 A. M.: 84.	N. by E.				Clear.
	2 25	6.1	765.70	30.118	27.5	26.	.146	(D. 24.5) 87.2	N. by E.				Clear.
	4 25	4.4	765.60	30.113	24.4	23.6	.139	(A. 26.) 93.9	N. by E.				Clear.
	6 25	4.3	766.15	30.140	23.5	23.5	.147	9 A. M.: 95.9	N. by E.				Ci., Ci-cu.
	8 25	4.8	767.10	30.175	23.2	28.4	.167	(D. 25.) 92.	N. by E.			8	Ci-cu., S.
	10 25	4.6	767.60	30.172	26.1	31.8	.164	(A. 30.6) 80.	N. by E.			8	Ci-cu., N., Cu-s.
	12 25	5.3	768.00	30.129	38.6	34.2	.165	3 P. M.: 76.	W.			8	Ci-cu., N., Cu-s.
22	14 25	6.8	765.50	30.102	39.8	35.3	.173	(D. 23.) 74.5	SW.			6	Ci-cu., Ci-s., Cu-s.
	16 25	6.8	765.20	30.090	37.5	33.2	.159	(A. 34.) 75.5	SW.			4	Ci., Ci-cu., Cu-s.
	18 25	7.3	766.00	30.130	36.	32.7	.167	9 P. M.: 80.4	E. by N.			8	Dark.
	20 25	7.5	766.15	30.125	33.6	31.8	.160	(D. 27.3) 84.5	E. by N.			1	Ci-cu.
	22 25	7.	764.55	30.085	31.5	30.5	.179	(A. 32.6) 91.4	E.			1	Cu-s.

* Previous to this time, the temperature of the air recorded with the dew point is that given by the thermometer attached to the instrument. This, however, has been rejected in all the night observations, because the observers' lamp in many cases evidently affected the thermometer. From November 21, 1840, the temperature of the air is that given by the observatory standard thermometer.

November.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1940.

Date.		Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
23	0	12.6	747.65	29.379	58.5	57.3	.465	3 A. M.:	93.5	SW.	..	.04	8	N., light rain.
	2	13.6	748.35	29.394	59.	58.5	.493	(D. 56.5)	93.6	SW. by W.	..		8	N., light rain.
	4	14.5	748.25	29.386	58.5	57.5	.470	(A. 58.6)	90.5	WSW.	..		8	N.
	6	14.7	749.00	29.414	56.6	55.5	.449	9 A. M.:	91.2	SW.	..		8	N.
	8	14.7	749.15	29.430	55.5	55.	.437	(D. 54.)	92.9	SW.	..		8	N.
	10	15.4	749.25	29.420	56.	53.7	.398	(A. 57.3)	89.	WNW.	..		8	Ci-cu., N., Cu s.
	12	15.3	750.25	29.461	53.	48.	.294	3 P. M.:	78.	NW.	2		8	Cu., Ci-cu., and N. from NNW.
	14	14.7	753.60	29.557	51.	45.	.247	(D. 41.5)	74.5	NW.	2		8	Ci-cu., Cu., N. from NW.
	16	13.7	755.00	29.656	46.3	39.5	.185	(A. 49.8)	70.	WNW.	3		7	Ci-cu., Cu. from W.
	18	12.3	757.75	29.772	44.	37.8	.175	9 P. M.:	70.	WNW.	1		7	Cu., N.
	20	11.5	758.65	29.810	42.7	36.7	.168	(D. 31.)	72.	WNW.	1		1	Ci. Cu.
	22	10.7	759.85	29.862	40.5	35.5	.170	(A. 42.)	72.5	WNW.	..		2	Ci cu. (?) in N.
24	0	10.	761.10	29.913	40.1	35.4	.172	3 A. M.:	75.8	NW.	..		..	Ci-cu.
	2	9.5	762.25	29.961	37.	33.	.162	(D. 38.3)	75.8	NW.	..		..	Clear.
	4	8.9	762.75	29.984	34.8	31.6	.164	(A. 36.)	79.	NW.	..		..	Clear.
	6	8.9	763.95	30.031	33.6	31.2	.170	9 A. M.:	84.1	NW.	..		..	S. and Ci-s. around Hor.
	8	8.2	764.40	30.052	37.8	33.8	.167	(D. 32.)	78.5	NW.	..		..	Cu-s. in W.
	10	8.8	765.00	30.072	41.	36.	.172	(A. 40.2)	76.5	NW.	..		..	Clear, little hazy.
	12	10.3	764.90	30.062	44.5	38.	.173	3 P. M.:	73.	WSW.	..		3	Cu., Ci-cu., Ci-s. from SW.
	14	11.3	764.40	30.037	45.2	39.2	.189	(D. 30.4)	71.	WSW.	..		4	Ci., Cu., Ci-cu.
	16	11.5	764.40	30.036	43.8	37.8	.183	(A. 45.2)	71.1	WSW.	..		2	Ci., Ci-s., S., Ci-cu.
	18	10.9	765.00	30.063	39.	34.9	.175	.....	77.	W. by N.	..		4	Light Ci-s. in Hor.
	20	10.3	765.40	30.081	37.3	33.5	.167	.....	77.5	W. by N.	..		3	Ci., Ci-s.
	22	9.3	764.80	30.063	35.	32.9	.182	.....	87.9	W. by N.	..		3	Ci., Ci-cu., Ci-s.

Date.		Barometer.				Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hgt., Gauss's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
Day.	Hour.	Temperature.	Obs'd height.	Corr. height.		Dry.	Wet.				Dir. points.	Force, lbs.			
26	h. m.														
	0 25	9.2	764.15	30.037		34.8	32.6	.179	3 A. M.: (D. 30.9)	88.9	W. by N.	..	..	8	Overcast.
	2 25	8.3	763.95	30.033		35.	33.5	.193	(A. 34.)	90.1	W. by N.	..	..	8	Overcast, N.
	4 25	8.4	764.50	30.055		34.	32.9	.194	9 A. M.: (D. 29.)	91.9	N.	..	..	8	N.
	6 25	8.9	761.95	29.952		34.8	33.	.187	9 A. M.: (D. 29.)	87.9	N.	..	..	8	N.
	8 25	8.	761.60	29.949		37.6	34.9	.191	(D. 29.)	84.	N.	..	..	8	N.
	10 25	7.6	761.15	29.927		40.7	37.	.196	(A. 40.3)	81.5	NE.	..	..	8	N.
	12 25	8.	759.00	29.840		42.4	39.	.216	3 P. M.: (D. 35.)	83.	NE.	..	..	8	N.
	14 25	8.2	757.00	29.761		41.5	39.2	.231	(D. 35.)	86.5	NE.	..	..	8	N.
	16 25	8.5	756.30	29.731		40.2	38.2	.246	(A. 42.5)	93.	NE.	..	..	8	N.
	18 25	8.6	755.20	29.698		38.	37.1	.229	9 P. M.: (D. 34.)	93.6	NE.	..	..	8	N.
	20 25	7.6	754.00	29.646		34.6	34.2	.211	(D. 34.)	96.	N.	..	..	8	N.
26	22 25	8.	753.50	29.626		31.4	33.	.191	(A. 34.6)	94.5	N.	..	..	8	N.
	0 25	7.7	753.00	29.606		34.	33.5	.204	3 A. M.: (D. 32.1)	94.1	NW.	..	..	8	N.
	2 25	7.5	753.00	29.607		35.4	34.	.198	(D. 32.1)	90.	NW.	..	..	8	N.
	4 25	7.1	753.25	29.619		36.6	34.4	.193	(A. 35.7)	85.8	NW.	..	..	8	N.
	6 25	6.8	754.50	29.671		38.5	34.3	.192	9 A. M.: (D. 33.)	83.1	NW.	..	..	8	N.
	8 25	7.	755.25	29.699		37.	34.	.180	(A. 39.)	82.	NW.	..	..	3	Ci., Cu. s.
	10 25	7.	756.00	29.728		39.2	34.4	.163	(A. 39.)	74.	NW.	1	..	3	Ci., Cu., Cu. s.
	12 25	8.	755.00	29.683		40.7	35.7	.171	.....	72.	WNW.	1	..	7	Ci., Cu., Ci. cu.
	14 25	8.	754.70	29.672		40.3	35.7	.176	.....	74.5	WNW.	1	..	7	Ci., Cu. with Ci. s.
	16 25	8.1	755.75	29.713		37.9	34.	.170	.....	75.	WNW.	..	..	7	Cu., Ci. cu., Cu. s., N.
	18 25	8.	756.70	29.750		33.3	32.9	.202	.....	90.	WNW.	..	..	8	N., snowing.
	20 25	7.3	756.70	29.754		33.5	32.8	.197	.....	92.	W.	..	..	8	N., snowing.
	22 25	6.9	757.00	29.768		33.4	32.	.185	.....	89.9	W.	..	..	8	N., snowing.

NOVEMBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1946.]

Day.	Hour.	Barometer.			Therm'm, Fnh.		Force of vapor, in.	Dew point, Fnh.	Hyg., Gausner's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temp., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Pace, lbs.			
27	0 25	6.7	757.15	29.775	32.6	32.	.193	3 A. M.: (D. 26.9)	89.9	NW.	1	..	8	N., snowing.
	2 25	6.	758.05	29.813	32.6	32.	.193		88.1	NW.	1	..	8	N., snowing.
	4 25	6.3	759.05	29.850	32.3	32.9	.181	(A. 36.2)	82.9	NW.	1	..	1	N.
	6 25	5.	761.05	29.935	31.2	28.9	.155		81.1	NW.	1	..	3	N.
	8 25	..	..	..	..	..	..		..	NNW.	1	..	..	..
	10 25	..	..	..	..	..	..		..	NW.	1	..	..	..
	12 25	..	..	..	..	..	..		..	NNW.	2	..	..	..
	14 25	..	..	..	..	..	..		..	NNW.	2	..	..	..
	16 25	5.8	764.70	30.076	34.6	32.	.173		73.	NW.	1	..	..	..
	18 25	6.8	765.45	30.109	31.3	31.	.189	3 P. M.: (D. 28.)	77.5	NW.	..	..	4	Cl., Cl-a.
28	0 25	6.1	766.30	30.127	30.7	30.3	.183	(D. 28.)	81.5	W. by N.	..	..	1	Cl., S.
	2 25	5.6	766.30	30.140	29.9	27.2	.141	(A. 30.)	..	W. by N.	..	..	..	Clear.
	4 25	5.1	766.40	30.106	28.6	26.7	.146	3 A. M.: (D. 23.1)	88.8	W.	..	..	4	Cl-a.
	6 25	6.2	766.00	30.125	28.	26.4	.147	(D. 23.1)	84.5	W.	..	..	..	Thin N.?
	8 25	5.9	766.10	30.121	27.2	25.6	.142	(A. 28.)	84.	W.	..	..	8	Cl-a. and thin N.
	10 25	5.3	766.45	30.140	26.	26.	.141	9 A. M.: (D. 20.5)	83.2	W.	..	..	8	Cl-a. Cu. from NW.
	12 25	5.8	766.40	30.127	31.4	28.3	.144	(A. 31.4)	79.5	WSW.	..	..	7	Cu., Cl., Cl-a. from SW.
	14 25	6.5	764.30	30.057	37.1	31.9	.149	3 P. M.: (D. 23.5)	77.5	SSW.	..	..	8	Cl., Cl-a. from SW.
	16 25	8.	763.10	30.001	44.	35.8	.135	(D. 23.5)	70.	SW.	1	..	2	Cl-a. Cu. from SW.
	18 25	9.6	763.00	29.989	40.4	36.1	.181	(A. 44.)	75.	SW.	..	..	2	Cl., Cl-a. Cu. near Her.
29	0 25	7.9	763.20	30.006	36.	32.5	.182	9 P. M.: (D. 28.6)	76.8	SW.	..	..	2	N.
	2 25	7.2	763.85	29.996	33.9	32.	.180	(A. 36.2)	84.2	SW.	..	..	4	Cu., S., N.

[1840.]

DAILY METEOROLOGICAL OBSERVATIONS.

Notizen.]

Date.		Barometer.				Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussner's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.									
30	4	9.7	756.90	29.750	47.	42.5	.336	3 A. M.:	79.	S.	..	8	N.		
	25	9.6	756.65	29.740	46.	42.	.238	(D. 38.3)	79.	S.	..	8	N.		
	2	9.5	756.50	29.735	45.9	41.9	.237	(A. 47.3)	81.1	S.	..	8	N.		
	4	9.5	756.55	29.737	45.6	41.6	.236	9 A. M.:	79.	S.	..	8	N.		
	6	9.5	756.40	29.728	47.4	42.7	.238	(D. 35.8)	78.	S.	..	8	N.		
	8	10.	756.30	29.724	49.5	44.3	.247	(A. 47.5)	75.	SSW.	..	8	N.		
	10	10.5	756.75	29.662	53.6	47.3	.269	3 P. M.:	74.	SW.	..	6	N.		
	12	10.5	754.00	29.628	53.7	46.5	.251	(D. 39.)	76.	SW.	..	4	N.		
	14	11.4	754.00	29.628	53.3	46.3	.260	(A. 54.)	72.	W.	..	1	N.		
	16	12.	756.15	29.708	51.4	43.8	.218	.....	52.	WNW.	..	..	N.
	18	12.3	759.15	29.880	48.	36.5	.106	.....	59.	NW.	..	..	N.
	20	11.5	762.35	29.961	38.9	30.7	.107	.....	59.	NW.	..	..	N.
	22	10.4	762.35	29.961	38.9	30.7	.107	.....	59.	NW.	..	..	N.

December.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840]

Day.	Hour.	Barometer.			Thermom. Fahr.		Force of vapor, lbs.	Dew point, Fahr.	Height, baromet.	Wind.		Rain, inches.*	Sky covered, Sols.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
1	h. m.													
	0 25	8.7	764.25	30.044	32.9	25.9	.089	3 A. M.: (D. 20.)	60.8	NW.			...	Cl cu.
	2 25	7.3	765.30	30.069	29.	23.5	.091	(A. 29.)	64.5	NW.			8	Light N.
	4 25	6.1	765.60	30.100	27.8	23.1	.097	9 A. M.: (A. 29.)	68.	NW. by W.			8	Light N. and S.
	6 25	5.7	766.90	30.164	27.	23.5	.111	9 A. M.: (D. 15.2)	74.1	NW. by W.			8	N., Cu-s., and S.
	8 25	5.	767.70	30.197	28.5	25.5	.128	(A. 29.2)	76.	NW.			8	N., Cu-s., and S.
	10 25	4.3	768.15	30.230	29.6	27.	.141	3 P. M.: (D. 17.3)	70.6	NW.			7	Cl., Cl-cu., Cu-s., N.
	12 25	4.6	768.90	30.168	31.	29.2	.162	(A. 32.2)	69.5	SW.			1	Cl s., Cu-s. in S.
	14 25	5.5	768.85	30.169	32.3	26.8	.135	9 P. M.: (D. 18.)	72.	SSW.			1	Cl-s., Cu-s. in S.
	16 25	6.	767.60	30.186	29.	26.4	.127	(A. 24.)	76.	SSW.			...	Clear.
	18 25	5.	768.45	30.137	28.8	24.4	.112	3 A. M.: (D. 19.)	83.5	SSW.			...	Clear.
	20 25	4.7	768.65	30.137	28.5	23.5	.129	(A. 26.4)	92.2	S. by E.			...	Clear.
2	0 25	3.7	768.50	30.236	29.	23.	.126	(D. 19.)	93.8	S. by E.			...	Clear.
	2 25	3.4	768.60	30.241	21.1	20.5	.135	(A. 29.3)	93.	S. by E.			...	Clear.
	4 25	3.6	768.70	30.250	20.9	20.5	.131	9 A. M.: (D. 20.)	94.1	S. by E.			...	Clear.
	6 25	3.	769.25	30.272	19.4	19.	.119	(A. 26.4)	90.	E.			...	Very hazy in Hor.
	8 25	1.3	769.50	30.266	18.	18.6	.137	3 P. M.: (D. 22.)	84.	SSE. W.			...	Slightly hazy.
	10 25	1.8	770.00	30.307	22.5	21.5	.155	9 P. M.: (A. 36.5)	74.	S. by W.			...	Clear.
	12 25	3.	769.50	30.323	30.3	28.3	.149	(A. 36.5)	71.	SW.			...	Hazy.
	14 25	4.4	769.70	30.285	34.7	30.7	.146	(D. 17.)	78.	SW.			...	Cl., Cl-cu. in W.
	16 25	5.7	769.00	30.251	37.	33.2	.139	(A. 26.5)	81.3	SSW.			...	Light S. in Hor., hazy.
	18 25	5.2	768.85	30.240	34.2	29.7	.131						6	
	20 25	4.6	769.00	30.245	30.6	27.1	.136							
	22 25	4.2	768.65	30.240	28.5	26.	.136							

* Snow of 5th and 6th not properly noted. Amount recorded at the Pennsylvania Hospital, 2.0 inches of water. Rain of 31st, also lost, recorded at Hospital, .32 inches.

December.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1949.

[27]

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Day.	Hour.	Barometer.			Therm'ms, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., saturation's.	Wind.		Rain, inches.	Sky covered, Sths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
3	h. m.													
	0 25	4.	768.00	30.214	26.9	25.4	.142	3 A. M.:	87.	SSW.	..	..	..	Light clouds in Hor.
	2 25	3.5	768.16	30.222	26.4	25.5	.149	(D. 24.1)	94.1	S. by W.	..	..	1	Light clouds in Hor.
	4 25	2.9	767.49	30.196	25.8	25.	.147	(A. 25.7)	94.	S. by W.	..	..	8	Cu., Cu-s.
	6 25	2.1	767.45	30.197	26.5	26.	.156	9 A. M.:	95.5	S. by W.	..	..	..	Cu., Ci cu., Cu-s.
	8 25	3.	768.36	30.231	26.3	27.4	.160	(D. 27.)	93.	S. by W.	..	..	..	Very light cloud in Hor.
	10 25	4.4	768.75	30.242	27.3	34.	.176	(A. 34.5)	86.	W. by N.	..	..	..	Very light cloud in Hor.
	12 25	5.5	767.50	30.187	42.5	38.	.195	3 P. M.:	74.	NW. by N.	..	..	7	Ci., Ci-s., Cu-s.
	14 25	6.9	767.40	30.177	45.	38.5	.177	(D. 26.8)	69.5	N. by E.	..	..	7	Ci., Ci s., Cu-s.
	16 25	8.	768.15	30.201	43.1	36.5	.161	(A. 45.5)	69.	N. by E.	..	..	3	Ci., Ci-s.
	18 25	8.2	768.45	30.248	38.5	33.5	.153	.....	73.	N. by E.	..	..	3	Ci., Ci-s.
	20 25	8.	769.90	30.279	36.1	31.8	.154	.....	71.	N. by E.	..	..	..	Clear.
4	22 25	7.2	771.10	30.311	35.5	31.2	.150	.....	76.	N. by E.	..	..	..	Clear.
	0 25	6.7	771.25	30.329	36.7	30.	.148	3 A. M.:	78.	NE.	..	..	..	Clear.
	2 25	6.	772.06	30.363	31.5	28.	.137	(D. 20.)	79.	NE.	..	..	..	Clear.
	4 25	6.2	772.25	30.371	30.	26.	.130	(A. 31.1)	77.1	NE.	..	..	..	Clear.
	6 25	4.4	773.15	30.415	26.8	23.5	.114	.....	79.	ENE.	..	..	8	N., Ci-cu., S., Ci-s.
	8 25	3.3	774.15	30.459	26.3	23.7	.123	.....	75.	ENE.	1	..	8	Ci-cu., S., Ci-s.
	10 25	3.4	774.00	30.453	26.1	22.6	.106	.....	71.	NE.	1	..	8	N., Ci-s.
	12 25	3.	773.55	30.437	27.	21.6	.092	.....	66.5	NE.	1	..	8	N.
	14 25	2.4	772.80	30.410	27.	21.6	.082	.....	68.	ENE.	1	..	8	N.
	16 25	1.7	772.40	30.393	25.1	22.1	.109	.....	74.5	ENE.	1	..	8	N., snowing.
	18 25	1.1	772.20	30.388	23.	22.3	.133	9 P. M.:	96.3	ENE.	1	..	8	N., snowing.
	20 25	1.	771.50	30.367	22.	21.6	.133	(D. 19.1)	93.	NE.	1	..	8	N., snowing.
	22 25	0.7	771.00	30.348	20.3	20.	.126	(A. 22.)	92.	NNE.	2	..	8	N., snowing.

December.]

DAILY METEOROLOGICAL OBSERVATIONS

[1890.

Day.	Hour.	Date.	Barometer.			Therm°s, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges's.	Wind.		Rain, inches.	Sky covered, Sths.	Clouds, &c.
			Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
5	0 25	A.	0.2	769.65	30.296	19.	18.6	.119	3 A. M.:	92.	NNE.	1	.	8	N., snowing fast.
	2 25		-0.2	769.46	30.290	18.7	18.5	.120	(D. 17.6)	93.	NNE.	2	.	8	N., snowing fast.
	4 25		-1.	768.90	30.275	19.5	18.4	.125	(A. 19.3)	92.	NNE.	2	.	8	N., snowing fast.
	6 25		-1.2	768.85	30.265	19.5	19.2	.122	9 A. M.:	92.	NNE.	2	.	8	N., snowing fast.
	8 25		-1.5	768.70	30.269	21.6	20.6	.122	(D. 15.4)	88.	NE.	2	.	8	N., snowing fast.
	10 25		-1.5	768.75	30.271	24.2	22.8	.129	(A. 22.7)	84.	NE.	3	.	8	N., snowing fast.
	12 25		-0.5	767.75	30.225	25.6	24.	.122	.....	80.5	NE.	3	.	8	N., snowing fast.
	14 25		-0.5	767.45	30.214	25.6	24.3	.122	.....	78.	NE.	3	.	8	N., snowing fast.
	16 25		0.0	768.10	30.236	25.5	24.	.124	.....	77.	NE.	2	.	8	N., snowing fast.
	18 25		0.0	768.40	30.250	24.5	23.	.129	9 P. M.:	75.3	NE.	3	.	8	N., snowing fast.
	20 25		-1.	768.10	30.243	23.1	20.1	.099	(D. 17.6)	75.	ENE.	2	.	8	N., snowing fast.
7	0 25		-1.3	768.05	30.242	21.9	19.5	.102	(A. 22.3)	73.1	ENE.	2	.	8	N., snowing fast.
	2 25		-1.1	762.00	30.026	25.9	24.5	.126	3 A. M.:	86.	NW.	.	.	1	Cl.-ca., Cl.-a.
	4 25		-1.3	763.80	30.074	23.4	21.	.120	(D. 18.3)	84.	NW.	.	.	1	S., Cl.-a.
	6 25		-1.6	764.25	30.128	22.	21.5	.122	(A. 21.)	81.9	NW.	.	.	8	N., snowing fast.
	8 25		-1.5	765.85	30.157	21.6	20.9	.127	9 A. M.:	81.9	NW.	.	.	8	N., snowing fast.
	10 25		-1.5	767.20	30.209	21.7	19.9	.111	(D. 17.5)	80.	NW.	.	.	4	Cl., Cl.-ca., Cu. a.
	12 25		-1.3	768.00	30.240	22.3	21.3	.116	(A. 22.4)	79.	NW.	.	.	.	Clear. Cl.
	14 25		0.8	768.15	30.236	22.6	22.6	.128	3 P. M.:	77.	NW.	.	.	.	Light Cl. in S.
	16 25		1.7	768.25	30.235	22.1	24.9	.121	(D. 15.4)	75.5	NW.	.	.	.	Light Cl. in S.
	18 25		1.9	769.00	30.263	26.6	24.2	.126	(A. 28.4)	75.	NW.	.	.	.	Hazy.
	20 25		1.8	769.55	30.286	22.5	21.1	.121	9 P. M.:	84.7	NW.	.	.	.	Clear.
	22 25		0.9	769.65	30.295	18.	17.5	.113	(D. 11.9)	90.	NW.	.	.	1	Cl.-a.
	24 25		0.2	769.35	30.286	15.7	15.5	.107	(A. 17.)	94.	NW.	.	.	1	Cl.-a.

Date.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
8	0 25	0.0	768.80	30.266	16.4	16.	.108	3 A. M.: (D. 10.8)	94.	NW.	..	..	..	Clear.
	2 25	2.	768.85	30.277	13.8	13.8	.103	(A. 16.2)	94.3	NW.	..	..	..	Clear.
	4 25	1.4	768.75	30.271	16.3	16.	.109	9 A. M.: (D. 11.9)	93.	NW.	..	..	..	Cl-a. in W.
	6 25	2.	767.75	30.233	18.	13.	.100	(A. 15.6)	94.	N. by W.	..	..	1	Cl.
	8 25	2.5	767.50	30.225	16.	16.	.112	3 P. M.: (D. 24.5)	94.	N. by W.	..	..	6	Cl., Cl-eu., S. from W.
	10 25	2.	767.10	30.207	21.6	20.6	.122	(A. 31.8)	90.5	N. by W.	..	..	1	Cl.
	12 25	0.5	765.70	30.145	29.5	27.5	.150	3 P. M.: (D. 28.7)	85.	N. by W.	..	..	8	N.
	14 25	0.4	764.25	30.084	31.6	29.8	.166	(A. 32.2)	86.5	SW.	..	..	8	N.
	16 25	1.3	764.30	30.091	31.8	31.6	.194	3 A. M.: (D. 29.9)	88.	W. by S.	..	..	8	N.
	18 25	2.2	764.55	30.087	32.2	31.4	.187	9 P. M.: (D. 30.)	92.2	W. by S.	..	..	8	N.
	20 25	3.	764.40	30.077	32.4	31.5	.187	(A. 31.3)	91.5	W. by S.	..	..	8	N.
	22 25	2.7	764.00	30.062	31.6	31.1	.188	3 P. M.: (D. 31.3)	93.	W. by S.	..	..	8	N.
9	0 25	3.1	763.60	30.044	29.6	29.4	.180	(A. 33.3)	95.8	W.	..	..	8	N.
	2 25	3.	763.15	30.027	30.	29.9	.184	(D. 29.)	96.	W.	..	..	8	N. and fog.
	4 25	3.	762.85	30.016	29.5	29.4	.181	9 A. M.: (D. 30.)	95.	W.	..	..	8	N. and dense fog.
	6 25	3.4	763.30	30.031	30.	29.	.169	(A. 31.3)	95.	W.	..	..	..	N. and dense fog.
	8 25	3.	763.30	30.028	29.9	29.8	.183	(D. 30.)	94.5	W.	..	..	..	N. and dense fog.
	10 25	3.4	763.10	30.023	33.	31.6	.182	3 P. M.: (D. 31.3)	93.	SSW.	..	..	..	N. and dense fog.
	12 25	4.5	762.25	29.985	35.2	33.5	.191	(D. 31.3)	91.	SSW.	..	..	..	N. and dense fog.
	14 25	5.	761.40	29.919	34.	33.2	.199	(A. 33.3)	92.	SSW.	..	..	..	N. and dense fog.
	16 25	5.5	761.30	29.943	32.	31.6	.192	.....	92.	SSW.	..	..	..	N. and dense fog.
	18 25	5.8	760.80	29.923	30.	.....	.....	.....	92.	SSW.	..	..	..	N. and dense fog.
	20 25	5.	760.00	29.894	27.2	.....	.....	.....	92.	SSW.	..	..	..	N. and dense fog.
	22 25	4.5	759.90	29.898	26.4	26.5	.....	.....	93.	SSW.	..	..	..	N. and dense fog.

* Wet bulb higher than dry in these three observations, wet bulb being coated with a very thick coating of ice.

Date.		Barometer.			Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gaussen's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
10	A. m.													
	0 25	3.	759.55	29.886	26.3	26.5	....	3 A. M.: 27.1	94.8	SW.	..	..	..	N. and fog.
	2 25	3.4	758.80	29.835	27.	26.7	.162	(D. 27.1)	94.6	SW.	..	..	..	N. and fog.
	4 25	3.5	758.25	29.832	30.5	30.	.181	(A. 28.1)	95.	SW.	..	.02	1	N. and fog, raining.
	6 25	3.5	757.85	29.817	29.	28.9	.177	9 A. M.: 28.9	94.	SW.	..	..	..	Ci. cu., N.
	8 25	3.4	756.10	29.827	31.5	31.	.187	(D. 31.5)	93.5	SW.	..	..	..	Ci. cu., N., foggy.
	10 25	4.	756.20	29.829	34.9	34.	.204	(A. 33.3)	91.	SW.	..	..	..	Ci. cu., N., foggy.
	12 25	5.2	757.60	29.800	38.8	37.	.218	3 P. M.: 36.7	87.5	SW.	..	..	..	Ci. cu., N.
	14 25	6.2	757.60	29.795	41.2	39.	.230	(D. 36.7)	84.	SW.	..	..	..	Ci. cu., N.
	16 25	6.8	758.45	29.825	45.6	43.5	.253	(A. 46.3)	87.8	NW.	..	..	..	Ci. cu., N.
	18 25	7.2	759.25	29.854	42.3	42.2	.284	9 P. M.: 42.2	89.5	NW.	..	..	..	Ci. cu., N.
11	20 25	7.	760.30	29.898	40.	....	....	....	89.8	NW.	..	..	..	Ci. cu., N.
	22 25	6.7	761.30	29.938	36.1	....	....	(D. 32.6)	89.8	NW.	..	..	..	Clear.
	0 25	4.2	762.65	30.003	30.	29.5	.177	(A. 42.5)	92.6	NW. by N.	..	..	..	Clear.
	2 25	5.2	763.90	30.046	31.4	29.5	.163	3 A. M.: 28.2	85.2	NNW.	..	..	..	Clear.
	4 25	4.5	764.40	30.070	29.	27.5	.155	(D. 28.2)	85.4	NNW.	..	..	..	Clear.
	6 25	4.	765.45	30.114	26.3	24.5	.184	(A. 31.7)	85.2	NNW.	..	..	..	Clear.
	8 25	3.	766.40	30.156	29.1	26.6	.139	9 A. M.: 27.	82.	NNW.	..	..	..	Clear.
	10 25	4.3	767.40	30.190	34.	30.5	.153	(D. 27.)	77.5	NNW.	..	..	..	Clear.
	12 25	5.3	767.00	30.168	37.5	33.	.156	(A. 32.8)	74.5	NNW.	..	..	..	Clear.
	14 25	6.3	766.90	30.160	38.8	33.8	.155	3 P. M.: 36.4	72.5	NW.	..	..	..	Clear.
12	16 25	7.	767.85	30.195	36.4	32.6	.161	(D. 26.)	74.	W.	..	..	..	Thin Ci., hazy in Hor.
	18 25	6.8	768.50	30.221	31.1	28.9	.156	9 P. M.: 31.1	81.5	W.	..	..	..	Clear.
	20 25	5.8	768.00	30.206	23.5	....	....	(D. 19.5)	92.	W.	..	..	..	Very light Ci.
	22 25	4.3	768.30	30.236	24.0	23.5	.142	(A. 32.8)	88.5	W.	..	..	2	Ci. cu.

* Wet bulb higher than dry in this observation, wet bulb being coated with a very thick coating of ice.

DECEMBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.

[46]

180

Day.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hyg., Gauges, &c.	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
		Temperature, centigrade.	Old height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
12	4. m.	3.7	767.85	30.310	21.4	21.2	.153	3 A. M.: (D. 19.6)	90.	WNW.	..	..	..	Clear.
	0 25	2.9	768.10	30.324	20.5	20.4	.139	(A. 20.5)	90.2	NW by W.	..	..	7	Cl., light N.
	2 25	2.	767.95	30.323	18.9	18.9	.124	9 A. M.: (D. 19.4)	96.5	NW by W.	..	..	6	N., Ci-cu., Ci-a.
	4 25	1.3	767.40	30.203	19.	19.	.125	9 A. M.: (D. 19.4)	94.	NW by W.	..	..	8	N., Ci-cu., Ci-a.
	6 25	1.3	767.90	30.184	25.7	24.5	.140	(D. 19.4)	88.	NNE.	..	..	8	N., Ci-cu., S.
	8 25	1.6	766.80	30.178	32.1	30.1	.166	(A. 26.2)	87.	NE.	..	..	8	N., Ci-cu.
	10 25	3.	764.30	30.073	36.8	33.5	.172	3 P. M.: (D. 29.6)	84.	NE.	..	..	6	Cl., Ci-cu.
	12 25	3.8	762.80	30.010	38.	35.3	.193	(A. 38.2)	84.5	ENE.	..	..	8	N.
	14 25	5.	761.40	29.949	38.8	37.8	.234	9 P. M.: (D. 38.5)	92.5	ENE.	.05	..	8	N., raining.
	16 25	5.	759.45	29.872	39.5	39.5	.260	(A. 40.5)	93.5	ENE.	.03	..	8	N., raining.
	18 25	6.3	757.05	29.777	41.5	41.	.268	(D. 33.5)	93.	ENE.	.15	..	8	N., raining.
	20 25	6.	754.90	29.690	43.	42.7	.287	3 A. M.: (D. 34.)	82.9	NW.	.06	..	8	N., raining.
14	0 25	9.1	755.00	29.677	40.9	37.1	.186	(D. 34.)	86.	NW.	..	..	6	Cu., Ci-cu. from NW.
	2 25	8.4	755.45	29.699	36.5	34.5	.195	(A. 36.2)	98.9	NW.	..	..	6	Cu., Ci-cu. from NW.
	4 25	7.8	755.00	29.684	34.9	33.9	.202	9 A. M.: (D. 30.6)	87.9	NW.	..	..	4	Cl., Ci-a.
	6 25	7.4	755.35	29.700	34.9	33.9	.202	(A. 39.5)	85.5	NW.	..	..	3	Cl., Ci-a. and S.
	8 25	8.	756.00	29.722	37.1	34.3	.184	3 P. M.: (D. 31.5)	83.	WNW.	..	..	1	Cl., Ci-cu.
	10 25	8.	756.20	29.730	40.	36.5	.194	(A. 43.5)	83.	WNW.	..	..	..	Light Cl. in S.
	12 25	8.8	755.15	29.685	41.6	37.	.186	9 P. M.: (D. 32.)	79.	W.	..	..	..	Clear.
	14 25	10.	754.60	29.659	43.5	38.3	.190	(A. 33.5)	77.	W. by N.	..	..	..	Clear.
	16 25	10.3	754.70	29.661	40.4	36.9	.197	(A. 43.5)	81.5	W.	..	..	..	Clear.
	18 25	9.5	754.70	29.655	35.5	34.3	.202	9 P. M.: (D. 32.)	90.	SW.	..	..	..	Clear.
	20 25	8.7	754.45	29.637	33.3	32.3	.190	(A. 33.5)	92.3	SW.	..	..	..	Clear.
23	26	8.	754.60	29.668	32.5	31.5	.186		92.	SW.	..	..	..	Clear.

December.]

DAILY METEOROLOGICAL OBSERVATIONS.

1840.

Date.	Hour.	Barometer.			Thermom. Fahr.		Force of vapor, ins.	Dew point, Fahr.	Hygr., German's.	Wind.		Rain, inches.	Sky covered, Eighths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
18	19	4. m.												
	19	0 25	754.85	29.682	31.	30.5	.184	3 A. M.: (D. 30.)	94.8	SW.	.	.	.	Clear.
		2 25	755.25	29.701	29.5	.....	.....	(A. 30.1)	94.1	SW.	.	.	.	
		4 25	754.65	29.681	30.1	.....	.....	9 A. M.: (D. 31.3)	94.8	SW.	.	.	1	Cl-s.
		6 25	755.05	29.698	28.5	.....	.....	(A. 32.)	96.	SW.	.	.	.	Cl., foggy.
		8 25	755.10	29.701	31.1	30.8	.188	(A. 32.)	94.	SW. by S.	.	.	.	Cl. from W.
		10 25	755.35	29.708	36.7	32.1	.149	3 P. M.: (D. 36.6)	92.5	SSW.	.	.	1	Cl., Cu-s. in NW.
		12 25	754.20	29.658	43.2	40.6	.141	(A. 46.5)	86.	SSW.	.	.	5	Cl., Cu-cu., Cu-s.
		14 25	753.00	29.604	46.2	43.	.257	9 P. M.: (D. 37.)	83.	S.	.	.	7	Cl., Cu-cu., Cu s.
		16 25	753.10	29.605	46.	42.8	.255	(D. 44.5)	84.	SSW.	.	.	5	Cl-cu.
		18 25	752.30	29.572	44.	41.4	.249	(D. 37.)	86.	SSW.	.	.	3	Cl., Cu-s.
19	19	20 25	752.20	29.568	43.5	40.8	.243	(A. 44.5)	84.	SW.	.	.	1	Few clouds in Hor.
		22 25	752.00	29.560	43.6	40.9	.243	3 A. M.: (D. 38.9)	83.	NNW.	.	.	3	Cl-cu. in Hor.
		0 25	752.10	29.564	43.9	41.	.243	(A. 42.7)	90.9	SW.	.	.	8	N., Cu-cu., Cu.
		2 25	753.85	29.633	45.3	41.7	.238	9 A. M.: (D. 35.6)	89.9	SW.	.	.	1	N., Cu-s. around Hor.
		4 25	754.00	29.639	40.5	39.	.234	(A. 40.)	89.	SW.	.	.	8	N., Cu-cu., Cu-s.
		6 25	754.40	29.656	40.	38.5	.229	(D. 39.6)	88.5	SW.	.	.04	8	N., raining.
		8 25	754.50	29.661	38.7	37.5	.218	(A. 33.)	91.	N. by E.	.	.	8	N., Cu.
		10 25	755.40	29.699	40.7	39.1	.217	(D. 29.4)	92.	N. by E.	.	.	8	N., snowing.
		12 25	753.60	29.631	38.	36.5	.203	(A. 33.)	94.	NW. by N.	.	.	8	N., snowing.
		14 25	753.00	29.607	33.4	33.	.185	9 P. M.: (D. 29.4)	89.5	NW. by W.	.	.	4	Clouds dispersing.
		16 25	752.50	29.591	32.8	32.6	.191	(A. 33.7)	83.	NW. by W.	.	.	.	Few clouds in E.
		18 25	752.45	29.589	33.1	32.8	.							
		20 25	753.10	29.615	34.1	32.8	.							
		22 25	753.20	29.662	33.2	30.7	.165							

Date.		Barometer.				Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Reaumur's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Dir. points.				Force, lbs.				
17	17	5.6	754.20	29.664	31.	39.1	.161	3 A. M.: 78.3	W.	78.3	W.	..	..	3	Clear.
	0 25	5.	754.60	29.683	28.3	36.5	.146	(D. 29.) 85.	W.	85.	W.	..	..	8	Cl., Ci-cu.
	2 25	4.6	754.75	29.691	29.5	..	..	(A. 29.5) 81.	W.	81.	W.	..	..	8	N., Cl., Ci-cu.
	4 25	4.	755.60	29.727	27.9	26.5	.150	9 A. M.: 78.9	WNW.	78.9	WNW.	..	..	1	N.
	6 25	3.8	756.50	29.763	26.6	25.	.139	(D. 20.) 79.	W. by N.	79.	W. by N.	..	..	..	Clear.
	8 25	4.	757.20	29.790	30.	26.7	.132	(A. 28.5) 72.	WSW.	72.	WSW.	..	..	..	Cl-cu. in Hor.
	10 25	4.5	757.20	29.790	30.	26.7	.132	3 P. M.: 70.	WSW.	70.	WSW.	..	..	4	Cu., Ci-cu.
	12 25	4.5	756.15	29.746	32.2	28.6	.141	(D. 19.6) 75.5	W.	75.5	W.	..	..	4	Ci-cu., Cu.
	14 25	5.	756.60	29.761	31.1	28.8	.155	(A. 30.5) 86.	WSW.	86.	WSW.	..	..	8	N., snowing.
	16 25	4.4	757.15	29.785	28.7	27.	.150	9 P. M.: 71.	W. by N.	71.	W. by N.	..	..	1	Cu., Cu-s. in SW.
	18 25	4.2	758.70	29.848	28.2	24.1	.109	(D. 19.) 79.5	W. by N.	79.5	W. by N.	..	..	..	Clear.
	20 25	3.4	759.20	29.870	28.8	31.3	.111	(A. 23.) 77.5	W. by N.	77.5	W. by N.	..	..	..	Clear, few clouds in W.
	22 25	2.2	760.15	29.914	22.9	20.9	.114	3 A. M.: 77.8	W. by N.	77.8	W. by N.	..	..	..	Clear.
18	0 25	1.7	760.35	29.924	22.8	19.2	.089	(D. 19.1) 77.	W. by N.	77.	W. by N.	..	..	..	Clear.
	2 25	1.	760.55	29.936	20.	18.5	.107	(A. 19.6) 74.1	W. by N.	74.1	W. by N.	..	..	3	Cu., Cl., Ci-s.
	4 25	0.3	760.20	29.926	19.9	18.4	.107	..	W. by N.	72.	W. by N.	..	..	8	N., Cu.
	6 25	0.0	760.50	29.939	21.5	20.1	.131	..	W. by N.	72.	W. by N.	..	..	..	Cl., Ci-cu., Cu-s.
	8 25	-0.3	760.75	29.950	22.5	21.5	.127	..	W. by N.	69.	W. by N.	..	..	6	Cl., Ci-cu., Cu-s.
	10 25	0.0	761.40	29.974	23.6	20.	.093	..	W. by N.	66.	W. by N.	..	..	3	Cu., Ci-cu.
	12 25	0.5	761.00	29.955	24.	21.3	.109	3 P. M.: 68.	W. by N.	68.	W. by N.	..	..	6	Cu., Ci-cu.
	14 25	1.	761.10	29.956	23.	19.4	.090	(D. 10.6) 70.	W. by N.	70.	W. by N.	..	..	4	Cl., Cu., Ci-cu.
	16 25	0.9	762.00	29.993	21.2	18.5	.095	(A. 23.) 71.	W. by N.	71.	W. by N.	..	..	4	Ci-cu., Ci-s. in Hor.
	18 25	0.0	762.05	29.999	18.	16.5	.099	9 P. M.: 70.	W. by N.	70.	W. by N.	..	..	4	Clear.
	20 25	-0.8	763.50	30.060	17.5	15.	.082	(D. 14.) 71.	W. by N.	71.	W. by N.	..	..	..	Clear.
	22 25	-1.4	763.80	30.075	17.	16.5	.109	(A. 17.) 70.	W. by N.	70.	W. by N.	..	..	..	Clear.

Day.	Hour.	Barometer.			Therm'm. Fahr.		Force of vapor, in.	Dew point, Fahr.	Hygr., percentage.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Obs'd height, millimeters.	Corr. height, inches.		Dry.	Wet.				Dir. points.	Force, lbs.			
19	0 25	763.80	30.078	-3.3	15.7	14.5	.693	3 A. M.:	75.2	W.	..	..	8	Clear.
	2 25	764.20	30.098	-3.	16.	15.	.697	(D. 16.1)	79.	W.	..	..	8	Overcast.
	4 25	764.10	30.098	-3.8	17.	16.	.102	(A. 16.6)	79.1	W.	..	..	8	Cu., Cu-s.
	6 25	764.55	30.114	-3.4	16.5	16.	.107	9 A. M.:	76.1	W.	..	..	..	Clear.
	8 25	764.70	30.131	-3.5	16.3	15.4	.100	(D. 11.)	77.	WSW.	..	..	..	Clear.
	10 25	765.40	30.140	-2.	20.	17.6	.094	(A. 19.8)	74.	W.	..	..	..	Ci cu., Cu-s. in Hor.
	12 25	764.40	30.097	-1.2	24.	21.	.104	3 P. M.:	73.5	W.	..	..	6	Ci., Cu., Ci cu.
	14 25	764.00	30.080	-0.8	24.9	22.9	.124	(D. 13.7)	70.	WNW.	..	..	4	Cu., Ci-cu.
	16 25	764.35	30.088	-0.6	23.4	20.2	.098	(A. 25.)	73.	WNW.	..	..	1	Cu., Cu-s.
	18 25	764.55	30.105	-1.5	21.	19.5	.112	9 P. M.:	74.	WNW.	..	..	..	Clear.
	20 25	765.20	30.133	-1.6	19.7	17.3	.098	(D. 16.5)	74.5	W. by N.	..	..	..	Clear.
21	22 25	765.90	30.161	-2.2	17.2	15.8	.097	(A. 18.8)	76.	W. by N.	..	..	..	Clear.
	0 25	763.85	30.075	-1.	21.4	21.1	.132	3 A. M.:	90.	W.	..	..	8	N., snowing.
	2 25	764.20	30.091	-1.3	20.2	20.	.127	(D. 18.7)	86.8	W.	..	..	3	S., N.
	4 25	763.80	30.076	-1.8	18.6	18.	.114	(A. 19.)	83.8	W.	..	..	..	Clear.
	6 25	764.90	30.122	-2.2	20.6	20.	.123	9 A. M.:	81.1	W.	..	..	..	Clear.
	8 25	765.70	30.152	-2.	23.2	20.8	.109	(D. 17.)	78.5	W.	..	..	..	Clear.
	10 25	766.15	30.163	-0.6	27.	24.	.119	(A. 25.8)	74.5	W.	..	..	..	Ci., Ci-s. in W. Hor.
	12 25	765.20	30.120	0.6	29.	26.	.131	3 P. M.	79.5	W. by N.	..	..	2	Ci., Cu., Ci cu. from N.
	14 25	765.40	30.125	1.2	29.5	26.5	.134	(D. 19.8)	70.	W. by N.	..	..	1	Ci-cu., Cu.
	16 25	765.40	30.124	1.3	28.2	24.7	.117	(A. 29.5)	71.	W. by N.	..	..	1	Ci., Cu-s.
	18 25	765.70	30.136	1.3	26.2	23.4	.118	9 P. M.:	74.	WSW.	..	..	1	Ci-cu., Cu-s.
	20 25	765.80	30.143	0.7	25.3	23.2	.124	(D. 23.9)	78.8	W.	..	..	6	N.?
	22 25	764.65	30.097	0.8	25.3	24.2	.140	(A. 26.)	86.5	SW.	..	..	2	Clouds in Hor.

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaumetre's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
22	0	25	763.25	30.045	26.2	24.8	.140	3 A. M.: 24.8	85.	SW.	..	..	..	Clear.
	2	25	762.20	30.004	27.5	25.6	.144	(D. 26.2)	87.2	SSW.	..	..	..	Overcast.
	4	25	759.90	29.914	27.5	25.5	.138	(A. 27.)	84.	S.	..	..	..	Overcast.
	6	25	757.85	29.835	29.8	27.3	.142	9 A. M.: 27.3	80.6	SSW.	..	..	..	Overcast.
	8	25	756.80	29.791	31.	29.	.159	(D. 24.)	81.	SW.	..	..	..	Overcast, N.
	10	25	756.00	29.756	33.	30.5	.164	(A. 32.)	83.	SW by S.	1	..	..	Cl-cu., N.
	12	25	753.60	29.656	36.3	31.9	.155	3 P. M.: 31.9	79.5	SW by S.	2	..	..	Cl., Cl-cu., Cu. from NW.
	14	25	753.00	29.629	38.2	34.2	.170	(D. 26.8)	79.	SW by S.	2	..	..	N., Cl-cu.
	16	25	755.00	29.704	37.1	31.8	.145	(A. 37.7)	61.5	W. by N.	6	..	..	Cu., Cl-cu., Cu-s.
	18	25	756.30	29.756	34.5	30.	.141	9 P. M.: 30.	66.8	W. by N.	3	..	..	Cu.
23	20	25	757.45	29.804	31.5	28.7	.149	(D. 23.8)	65.3	W. by N.	3	..	..	Cl-cu.
	22	25	758.00	29.830	30.2	25.1	.105	(A. 31.4)	65.	WNW.	5	..	..	Clear, except few clouds in Hor.
	0	25	759.40	29.889	26.3	23.	.111	3 A. M.: 23.	69.	NW.	6	..	..	Cu., Cl-cu. in Hor.
	2	25	761.25	29.967	25.9	23.2	.118	(D. 24.1)	70.	NW.	2	..	..	Cu.
	4	25	762.15	30.004	25.8	21.9	.100	(A. 26.)	69.3	NW.	2	..	..	Clear.
	6	25	764.20	30.088	23.7	21.7	.118	.....	69.9	NW.	1	..	..	Clear.
	8	25	765.40	30.136	22.3	18.6	.086	.....	66.	NW.	1	..	..	Clear.
	10	25	766.00	30.158	24.	20.4	.095	.....	67.5	NW.	1	..	..	Clear.
	12	25	764.80	30.108	26.4	23.4	.116	3 P. M.: 23.4	68.5	NW.	1	..	..	Clear.
	14	25	763.65	30.067	28.5	26.7	.147	(D. 14.9)	69.	W.	..	..	..	Cl-cu., Cu-s. in Hor.
24	16	25	762.80	30.080	27.5	24.	.114	(A. 28.7)	70.	WSW.	..	..	..	S., Cl., Cl-s., Cu.
	18	25	761.20	29.957	23.7	23.	.122	.....	79.	SSW.	..	..	..	Cl-s.
	20	25	760.00	29.914	24.	22.4	.125	.....	80.	SSW.	..	..	..	Some Cl., Cl-s.
	22	25	757.30	29.809	27.5	24.1	.116	.....	76.	SSW.	2	..	..	Clear.

DAILY METEOROLOGICAL OBSERVATIONS.

December.]

Day.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hyg., Beaumore's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
24	Dec. 24	1.	756.20	29.764	28.7	25.8	.131	3 A. M.: (D. 21.9)	76.	SW.			1	Cl., Cl.-s., Cl.-cu., hazy.
	2 25	1.	756.40	29.772	29.7	27.5	.148	(A. 29.1)	72.8	WSW.	1		8	Overcast, N.
	4 25	0.9	755.95	29.756	28.9	25.	.116		71.9	WSW.			2	N.
	6 25	0.8	756.65	29.783	28.3	26.	.138	9 A. M.: (D. 19.8)	71.8	WSW.			3	Cu.
	8 25	1.5	757.55	29.816	30.2	29.2	.170	(A. 33.2)	70.6	W.				
	10 25	1.6	758.68	29.858	33.	28.5	.131	(D. 22.)	70.7	W.			7	Cu., Cl.-cu. from NW.
	12 25	2.8	757.90	29.823	34.4	30.	.142	(A. 34.3)	72.5	W.			7	Cl.-cu., Cu. from WNW.
	14 25	4.	758.00	29.821	34.5	31.5	.166		71.	WNW.			6	Cl.-cu., Cu. from WNW.
	16 25	4.	759.00	29.860	33.	29.3	.144		70.	WNW.	1		6	Cu., Cl.-cu.
	18 25	3.2	759.85	29.896	29.5	25.5	.118	9 P. M.: (A. 26.)	75.	WNW.	1		2	Cu.-s.
	20 25	2.3	760.55	29.930	26.5	23.	.109		74.	N.			1	Cu.-s.
	22 25	1.5	761.60	29.974	20.8	18.8	.104	3 A. M.: (D. 8.8)	72.9	N.	1			Clear.
25	Dec. 25	0.4	762.05	29.997	17.	15.	.087	(A. 13.7)	74.2	NW.				Clear.
	2 25	-0.8	763.30	30.052	15.1	13.4	.084		77.9	NNW.				Clear.
	4 25	-1.8	763.10	30.048	12.1	11.1	.083		80.4	NW.				S., Cu.-s.
	6 25	-2.7	763.80	30.060	11.	10.5	.086		77.5	NW.			1	Cl., Cu.-s., S.
	8 25	-3.7	764.00	30.088	14.2	12.7	.084		73.	NW.			1	Cl., Cu.-s., S.
	10 25	-2.4	764.50	30.107	17.9	15.6	.087	3 P. M.: (D. 16.5)	71.	NW.			7	Cl., Cl.-cu., N.
	12 25	-1.7	762.80	30.037	19.4	16.3	.080	(A. 20.5)	73.5	WNW.			4	Cl., Cl.-cu., Cu.-s.
	14 25	-1.2	762.00	30.003	20.	16.5	.079		74.5	WNW.			2	S. (?) in SW.
	16 25	-1.	760.95	29.992	18.5	16.	.087		73.	E.			8	N., (?) overcast.
	18 25	-1.3	760.50	29.945	15.4	13.6	.084		78.5	SE.			8	N., (?) overcast.
	20 25	-1.7	759.60	29.911	19.5	16.8	.088							
	22 25	-2.2	760.00	29.929	18.9	17.5	.104							

December.]

DAILY METEOROLOGICAL OBSERVATIONS.

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Day.	Date.	Barometer.				Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.	
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Dir. points.				Force, lbs.					
26	A. M.															
	0 25	-2.7	758.70	29.890	17.5	17.3	.115	3 A. M.: 91.4	SE.					8	Overcast, snowing.	
	2 25	-2.9	757.25	29.824	18.5	18.5	.122	(D. 17.9) 92.9	SE.					8	Overcast, snowing.	
	4 25	-3.	754.85	29.731	18.5	18.5	.123	(A. 18.6) 92.2	E.					8	Overcast, snowing.	
	6 25	-3.	752.50	29.638	21.1	21.1	.135	9 A. M.: 94.4	E.					8	Overcast, snowing.	
	8 25	-2.6	751.00	29.576	26.4	26.4	.163	(D. 25.6) 91.5	E.					8	Overcast, snowing.	
	10 25	-1.8	749.40	29.509	36.	33.5	.182	(A. 27.7) 89.	S.			2		8	Overcast, raining.	
	12 25	-0.4	746.00	29.369	39.1	36.9	.213	3 P. M.: 84.	SE.			3		8	Overcast, raining.	
	14 25	0.7	745.00	29.324	36.2	35.5	.218	(D. 28.6) 93.	+					8	Overcast, raining.	
	16 25	1.5	744.80	29.312	34.1	33.9	.211	(A. 35.5) 92.					±.29	8	Overcast, raining.	
	18 25	2.	745.20	29.326	32.8	32.6	.202	0 P. M.: 92.								Clouds in Hor.
	20 25	2.	746.10	29.361	31.8	31.6	.194	(D. 30.) 92.								Hazy and cloudy in Hor.
	22 25	2.	746.60	29.381	29.5	•	•	(A. 31.2) 92.								Clear.
	28	0 25	-2.8	756.40	29.790	20.3	18.5	.104	3 A. M.: 78.2	NNW.			8	1	1	Very light clouds.
2 25		-3.3	757.55	29.839	20.1	18.4	.105	(D. 17.5) 77.2	NNW.			7			Clear.	
4 25		-3.6	758.95	29.895	19.8	18.5	.109	78.3	NNW.			4			Clear.	
6 25		-3.7	760.00	29.938	19.8	18.4	.108	80.	NNW.			2			Clear.	
8 25		-3.5	761.70	30.009	20.6	18.8	.106	79.	NW.			1			Clear.	
10 25		-2.6	762.90	30.015	23.3	21.	.111	75.6	WNW.			1			Few Cu.-s. in NW.	
12 25		-0.4	762.10	30.002	26.5	23.5	.117	3 P. M.: 73.	W.			1			Very little Ci.-cu. in N.	
14 25		0.7	761.50	29.974	28.6	26.5	.143	(D. 17.2) 71.5	W.			6		1	Ci.-cu. in N.	
16 25		1.3	761.35	29.965	28.	24.	.109	(A. 28.7) 71.	W.			1			Cu.-s. in N.	
18 25		1.	762.20	29.999	26.5	23.3	.114	73.5	W.			3			Clear.	
20 25		•	•	•	•	•	•	•	•			•			•	
22 25		-0.2	763.20	30.043	26.	24.	.129	75.6	WNW.			4		1	Ci.-cu.	

* This is recorded 31.6 wet bulb, there being a thick coating of ice on the bulb.

† Vane broke down.

‡ Rain about .25, snow .04 inches—rain and melted snow.

§ Taken 1 hour late.

Date.	Hour.	Barometer.		Therm'm, Fah.		Dew point, Fah.	Hygr., Centimeters.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.		Dir. points.	Force, lbs.			
29	h. m.											
	0 25	-0.3	763.35	30.051	24.4	23.1	134	3 A. M.: 84.3			1	Cl-cu., S.
	2 25	-0.8	763.66	30.063	23.2	22.1	129	(D. 18.3) 86.2			1	Ca., N.
	4 25	-1.1	763.40	30.057	22.8	22.1	131	(A. 23.) 88.7			4	Ca., N.
	6 25	-1.2	763.90	30.078	23.5	23.4	145	*10 A. M.: 90.9			8	Ca., N.
	8 25	-1.	764.40	30.097	24.2	23.7	143	(D. 20.6) 91.			4	Cl., S.
	10 25	0.3	765.25	30.124	22.4	29.6	155	(A. 32.4) 82.	2		6	Cl., Cl-cu.
	12 25	2.3	764.00	30.065	34.6	31.	156	3 P. M.: 78.			8	N., Cl-cu.
	14 25	3.5	764.15	30.064	35.6	33.	163	(D. 22.7) 77.2			8	N., Cl., Cu-s.
	16 25	4.	764.40	30.073	34.5	31.5	166	(A. 26.) 80.2	1		8	Cl-cu.
	18 25	4.	765.40	30.112	31.7	29.7	164	9 P. M.: 84.	1		7	Clear.
	20 25	5.	766.40	30.145	30.1	28.6	162	(D. 30.3) 84.5			..	Clear.
30	22 25	2.	766.00	30.140	27.4	26.6	156	(A. 28.3) 83.			..	Ca., S.
	0 25	2.3	766.25	30.154	25.4	24.9	149	3 A. M.: 91.3	1		1	Ca., Cu-s.
	2 25	1.7	765.85	30.140	24.5	24.1	146	(D. 22.) 92.4			2	Ca., N.
	4 25	1.8	765.45	30.124	25.9	25.4	152	(A. 24.9) 91.8	1		8	N.
	6 25	1.3	766.75	30.138	27.5	26.7	157	9 A. M.: 89.	1		8	Ca., Cu-s, N.
	8 25	1.4	765.50	30.128	29.3	28.3	165	(D. 25.3) 89.	1		8	Cl-cu., N., Cu-s.
	10 25	1.8	766.50	30.168	33.6	31.	176	(A. 31.5) 85.	1		8	Cl-cu., N., Cu-s.
	12 25	2.4	765.75	30.133	33.4	32.	185	3 P. M.: 83.			8	Cl-cu., N., Cu-s.
	14 25	3.3	764.30	30.071	35.5	32.	164	(D. 24.5) 80.			8	N., S., Cl-cu.
	16 25	3.8	763.80	30.049	35.	31.6	163	(A. 35.5) 79.			8	Cl-cu., N., Cu-s.
	18 25	3.5	764.25	30.068	34.2	31.8	172	9 P. M.: 83.			8	N.
	20 25	3.3	764.25	30.069	33.5	31.6	177	(D. 27.5) 87.			8	N.
	22 25	3.	763.75	30.051	33.6	32.	183	(A. 33.5) 87.5			8	N.

* One hour late.

DAILY METEOROLOGICAL OBSERVATIONS.

DAILY METEOROLOGICAL OBSERVATIONS.

[1840.]

[97]

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Day.	Hour.	Barometer.				Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., saturation %.	Wind.		Rain, inches.†	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Dir. points.				Force, lbs.				
31	0	3.2	763.20	30.028	33.5	31.8	.181	3 A. M.: (D. 31.9)	89.	NW.	1	.	8	N.	
	2	3.2	763.05	30.032	33.2	32.	.187	(A. 33.)	91.1	NW.	2	.	8	N., raining.	
	4	3.2	763.20	29.989	32.8	32.3	.195	9 A. M.: (D. 33.)	91.4	NW.	2	.	8	N., raining.	
	6	3.	763.35	29.996	32.7	32.5	.201	(D. 33.)	94.3	NW.	1	.	8	N., raining.	
	8	3.	763.70	30.010	33.1	32.8	.202	(A. 34.4)	95.	NW.	3	.	8	N., raining.	
	10	4.	763.00	30.017	34.6	34.	.207	*4 P. M.: (D. 31.)	94.	NW.	1	.	8	N., fog.	
	12	4.5	762.00	29.975	37.1	36.3	.223	(A. 37.)	92.	NW.	.	.	8	N., fog.	
	14	5.5	762.50	29.990	38.6	36.8	.216	9 P. M.: (D. 27.5)	87.	W.	.	.	1	Ci-cu., hazy.	
	16	5.5	762.70	29.998	37.2	36.	.216	(D. 27.5)	85.	.	.	.	3	Ci-cu., S.	
	18	5.	763.30	30.023	36.5	34.	.186	(A. 32.3)	84.	.	.	.	8	N., Ci-cu.	
	20	4.4	764.00	30.054	34.7	32.2	.173		83.5	.	.	.	8	N., Ci-cu.	
	22	3.5	764.70	30.066	30.8	29.1	.163		81.	.	.	.	8	N.?	

* One hour and a half late.

† Rain not observed.

MAGNETIC OBSERVATORY,

AT THE

CHARD COLLEGE, PHILADELPHIA.

METEOROLOGICAL OBSERVATIONS

ON THE

MAGNETIC AND METEOROLOGICAL TERM DAYS,

FROM JUNE TO DECEMBER, 1840.

GENERAL NOTES.

The instruments are the same, and the observations and corrections are made as already stated in the general notes to the ordinary meteorological observations.

On the magnetic term days, the meteorological observations were taken at the Göttingen hours, nearly, so as to fall in their places conveniently, in reference to the term day magnetic observations.

On the meteorological term days, the observations were made at the observatory hours.

July 22, 23.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

[1840.]

Göttingen time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, &c.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
23.	28.9	766.65	30.041	82.9	68.	.514	.....	65.	SSW.	..	..	S, Ci-a, hazy	1
23.	28.	766.25	30.030	78.	65.2	.477	.....	64.	S.	..	..	Ci., hazy from NW.	1
0.	25.5	766.00	30.031	74.7	64.4	.490	.....	68.	S. by W.	..	..	Ci., S. from N.	1
1.	24.2	765.90	30.034	71.5	63.6	.500	2h. 40m.	72.	SSW.	..	..	Ci., Ci-a, Cu-a, S.	3
2.	24.6	766.10	30.040	69.6	63.3	.513	(D. 56.5)	72.	S. by W.	..	..	Ci., Ci-a.	1
3.	22.	765.85	30.042	68.	62.6	.516	.....	82.	SSW.	..	..	Cu-a. in W.	..
Means.	...	...	30.036	74.1	...	.502	.....	70.5	.....	..	..	.....	..
4.	25.	765.90	30.030	66.2	62.8	.536	.....	86.	S.	..	..	Clear	..
5.	25.	766.00	30.034	65.5	62.8	.544	.....	88.	S.	..	..	Clear	..
6.	25.1	766.00	30.034	64.5	62.9	.556	.....	90.6	SW. by S.	..	..	S, Ci-a.	2
7.	24.4	765.65	30.023	65.5	63.9	.577	.....	91.2	SW. by S.	..	..	Ci-cu, Cu-s.	8
8.	24.3	765.35	30.012	65.9	64.	.576	.....	90.9	SSW.	..	..	Cu.	1
9.	24.2	765.30	30.010	64.6	63.	.560	.....	91.3	SSW.	..	..	Ci-a, Cu.	3
Means.	...	...	30.024	65.4	...	.558	.....	89.7	.....	..	..	.....	..
10.	23.9	765.20	30.007	64.4	62.9	.559	.....	91.5	SW. by S.	..	..	Ci-a, Cu.	..
11.	23.7	765.15	30.006	66.2	63.8	.566	.....	90.	S. by W.	1	..	Ci., Cu, Ci-cu. S., from W.	3
12.	22.	764.65	29.995	69.2	66.5	.618	.....	88.	S. by W.	1	..	Ci., Ci-a, Ci-cu.	4
13.	23.	764.55	29.987	71.5	67.4	.622	.....	86.	S. by W.	1	..	Ci., Ci-cu., Cu-s.	5
14.	24.5	764.45	29.976	75.	69.	.637	.....	81.	SSW.	1	..	Ci-a, Ci.	8
15.	25.1	764.05	29.957	76.	69.5	.642	.....	80.	SSW.	1	..	Ci-a, Cu.	7
Means.	...	...	29.988	70.4	...	.607	.....	85.9	.....	..	..	.....	..
16.	25.5	763.40	29.928	76.5	68.2	.595	.....	81.7	SSW.	1	..	S, Ci-a.	8
17.	25.9	763.00	29.911	77.3	70.5	.663	.....	77.5	SSW.	1	..	S, Ci-a.	8
18.	26.	762.55	29.894	77.2	70.	.646	.....	75.5	S. by W.	1	..	S, Cu-s.	8
19.	25.	762.40	29.892	74.4	67.2	.666	20h. 40m.	78.	S. by W.	1	..	Overcast.	8
20.	24.	761.75	29.872	73.5	66.	.654	(D. 67.)	80.	S.	1	..	Overcast.	8
21.	24.5	760.80	29.833	74.	69.7	.672	.....	85.	S. by E.	1	..	Cu., Cu-a, Ci-cu.	8
Means.	...	...	29.886	75.5	...	.636	.....	79.6	.....	..	..	.....	..

August 20, 20.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

[1840.]

Göttingen time.	Barometer.		Therm °s, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.			Dr. points.	Force, lbs.			
23.	27.	764.90	29.981	78.5	69.2	.605	...	E. by S.	...	...	Cu., N., Ci.-s.	5
23.	26.3	764.75	29.979	76.5	68.2	.593	...	E. by S.	...	...	Ci., Cu.-s., Ci.-s., Cu.	3
0.	25.4	764.75	29.983	73.9	67.	.582	...	E.	...	...	Ci.-s., Ci.-cu.	4
1.	24.7	765.05	29.988	70.3	65.5	.574	...	E.	...	...	Cu., Ci., Ci.-s.	3
2.	24.4	765.55	30.019	70.3	66.2	.596	...	E.	...	...	Dark Cu.	4
3.	24.2	765.60	30.022	69.3	66.	.601	...	E.	...	...	Dark Cu. in N. and W.	1
Means.	...	...	30.021	73.1	...	.593	...	...	...	...	...	...
4.	23.	765.60	30.028	67.5	65.5	.606	...	E.	...	...	Ci.-s. in N. and W.	1
5.	21.3	765.50	30.032	66.	64.5	.590	...	E.	...	...	Cu., Ci.-s.	3
6.	20.3	765.35	30.031	65.5	64.5	.596	...	E.	...	...	Overcast with heavy clouds.	6
7.	22.1	765.20	30.016	66.2	64.6	.591	...	E.	...	...	Dark clouds in Hor.	3
8.	20.3	764.75	30.007	64.7	63.7	.580	...	E.	...	...	N., Cu.-s.	3
9.	19.6	764.80	30.013	64.5	63.7	.582	...	E. by N.	...	...	N., Cu.	2
Means.	...	...	30.021	65.7	...	.591	...	...	...	...	...	...
10.	20.3	765.00	30.016	65.3	64.6	.601	...	ENE.	...	...	Very dense fog.	...
11.	21.4	765.40	30.028	66.5	65.6	.620	...	ENE.	...	...	Very dense fog, diminishing.	...
12.	21.1	765.75	30.043	67.5	66.2	.627	...	ENE.	...	...	A slight mist.	...
13.	21.7	766.10	30.054	68.2	66.9	.642	14.4 40m.	ENE.	...	...	Light clouds.	3
14.	23.	766.30	30.052	71.5	68.7	.665	(D. 61.5)	E.	...	...	Ci.-cu., Cu. from E.	3
15.	23.7	766.80	30.052	73.5	70.5	.705	...	E.	...	...	Ci.-s., Cu. from SE.	6
Means.	...	...	30.041	68.7	...	.643	...	...	...	...	...	...
16.	25.	766.50	30.054	75.6	71.	.700	...	S. by E.	...	...	Ci.-s., Cu.	5
17.	25.6	766.45	30.049	76.7	71.5	.705	...	E.	...	...	Cu. from SE.	7
18.	26.	766.20	30.037	76.5	69.5	.696	...	E.	...	...	Cu. from S.	7
19.	26.7	766.05	30.028	79.1	71.4	.675	30.4 40m.	ESE.	...	...	Cu. from SE. by S.	7
20.	27.	765.75	30.014	78.7	70.	.620	(D. 61.5)	SE.	...	...	Cu. from S.	8
21.	26.	765.60	30.013	78.	70.5	.665	...	S.	...	...	Cu.-s.	8
Means.	...	...	30.032	77.4	...	.667	...	...	...	...	...	...

SEPTEMBER 23, 24.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

[1940.]

Cooling time.	Barometer.			Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gaumure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, Eths.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
1.	20.5	767.20	30.104	69.	56.4	.322	.....	61.6	W.	..	..	Clear.....	..
2.	20.5	767.30	30.106	69.6	55.5	.359	.....	68.9	W.	..	..	Clear.....	..
3.	20.	767.25	30.106	57.7	52.3	.343	.....	74.1	W.	..	..	Clear.....	..
4.	19.8	767.75	30.128	51.	50.7	.345	2h. 40m.	82.	W.	..	..	Clear.....	..
5.	19.6	768.00	30.139	53.5	49.9	.331	(D. 43.)	84.	W.	..	..	Clear.....	..
6.	19.5	768.00	30.140	50.	48.9	.318	.....	91.9	W.	..	..	Clear.....	..
Means	.....	.....	30.130	58.	.....	.341	.....	77.1	.....	..	..	.....	..
7.	19.4	768.05	30.141	47.5	45.9	.329	.....	93.	W.	..	..	Clear.....	..
8.	18.9	768.05	30.144	49.4	47.5	.321	.....	90.1	W.	..	..	Clear.....	..
9.	18.5	768.50	30.164	52.	48.7	.320	.....	86.2	NNW.	..	..	Clear.....	..
10.	18.2	768.55	30.165	51.	48.5	.327	8h. 40m.	89.2	NNW.	..	..	Clear.....	..
11.	17.8	768.60	30.171	51.	48.4	.323	(D. 38.)	88.9	NNW.	..	..	Clear.....	..
12.	16.7	768.80	30.184	49.8	47.7	.321	.....	90.8	NNW.	..	..	Clear.....	..
Means	.....	.....	30.161	50.1	.....	.323	.....	89.7	.....	..	..	.....	..
13.	16.8	769.05	30.193	48.5	47.	.320	.....	92.8	NNW.	..	..	Clear.....	..
14.	16.7	769.75	30.221	46.7	46.7	.315	.....	92.7	NNW.	..	..	Clear.....	..
15.	16.2	770.25	30.242	48.1	46.7	.317	.....	92.9	NNW.	..	..	Clear.....	..
16.	16.3	770.70	30.259	53.9	51.2	.358	.....	89.2	NNW.	..	..	Clear.....	..
17.	17.5	771.00	30.265	57.7	54.6	.402	.....	80.5	ENE.	..	..	No clouds, hazy.....	..
18.	17.3	771.20	30.275	61.1	55.6	.388	.....	80.5	ENE.	..	..	No clouds, hazy.....	..
Means	.....	.....	30.242	52.9	.....	.350	.....	86.8	.....	..	..	.....	..
19.	18.	771.50	30.283	63.	57.	.405	.....	79.5	ENE.	..	..	No clouds, hazy.....	..
20.	18.5	771.50	30.280	64.4	57.	.389	.....	77.7	ENE.	..	..	No clouds, hazy.....	..
21.	19.5	771.10	30.260	65.5	58.	.404	.....	76.	ENE.	..	..	A few small Cu. in Hor.....	..
22.	20.	770.85	30.247	67.2	58.6	.402	20h. 40m.	74.	ENE.	..	..	A few small Cu. in Hor.....	..
23.	21.8	770.60	30.229	69.	60.	.421	(D. 50.)	72.	E.	..	..	A few small Cu. in Hor.....	..
24.	22.5	770.70	30.229	69.7	60.	.413	.....	72.	E by N.	..	..	A few small Cu. in Hor., hazy.....	..
Means	.....	.....	30.266	66.5	.....	.406	.....	75.9	.....	..	..	.....	..

October 21, 22.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

[1846.]

Göttingen time.	Barometer.		Therm'rs, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Beaumart's	Wind.		Rain, inches.	Clouds, &c.	Sky covered, eels.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.			Dir. points.	Force, lbs.			
23.	18.	755.55	29.857	58.5	58.2	.490	91.4	NE.	..	..	N., raining.	8
23.	18.2	755.15	29.641	59.	57.5	.475	93.	NE.	..	.02	N., raining.	8
0.	18.4	754.60	29.620	59.	57.8	.484	94.	NE.	..	.01	N.	8
1.	18.5	754.15	29.601	59.	57.7	.482	93.3	NE.	..	..	N., raining.	8
2.	18.5	754.20	29.603	57.5	57.7	.467	94.	NW by N.	..	.03	N., raining.	8
3.	18.5	753.85	29.589	57.7	57.2	.471	93.2	NW by N.	..	.01	N., raining.	8
Means.	..	..	29.618	57.9	..	.478	93.1	..	..	..	..	..
4.	18.7	753.00	29.556	57.2	57.	.471	94.1	NW by N.	..	.11	N., raining.	8
5.	18.7	752.80	29.547	57.1	56.5	.458	93.	NW by N.	..	.01	N., ceased raining.	8
6.	18.7	752.85	29.550	56.4	56.	.454	92.9	NW.	..	..	N.	8
7.	18.5	753.05	29.557	56.2	55.5	.442	92.4	NW.	..	..	N.	8
8.	18.4	753.20	29.564	56.6	55.8	.446	92.2	NW.	..	..	N.	8
9.	18.3	753.00	29.555	57.5	55.7	.433	89.9	NW.	..	..	N.	8
Means.	..	..	29.555	56.8	..	.451	92.4	..	..	..	..	..
10.	18.	753.90	29.593	57.	53.	.370	83.9	NNW.	4	..	N.	8
11.	17.	755.75	29.670	53.7	49.	.308	79.8	NNW.	3	..	Cu., N.	8
12.	16.6	756.70	29.710	50.9	45.6	.262	78.	NNW.	4	..	Cu., N.	7
13.	16.1	757.90	29.759	50.5	44.8	.248	75.4	NNW.	7	..	Ci., Cu.	1
14.	16.	759.25	29.811	51.	44.7	.240	74.	NNW.	3	..	Cu., Ci-cu. from N.	1
15.	16.	759.85	29.835	51.3	44.3	.239	71.	NNW.	3	..	Cu., Ci-cu. from NW.	1
Means.	..	..	29.730	52.4	..	.276	77.	..	..	..	..	..
16.	15.	760.25	29.856	51.6	44.	.219	69.	NNW.	3	..	Cu., Ci-cu. from N.	3
17.	14.7	760.50	29.868	52.5	45.3	.237	69.	NNW.	2	..	Cu., Ci-cu. from NNW.	3
18.	14.6	760.45	29.866	53.6	45.2	.223	67.	NNW.	2	..	A few scattered Cu.	..
19.	14.6	760.50	29.868	54.	45.	.213	65.	NNW.	2	..	Clear.	..
20.	15.	761.40	29.901	54.4	44.3	.194	63.	NNW.	2	..	Clear.	..
21.	15.3	761.75	29.914	54.7	44.5	.195	61.5	NNW.	..	..	Clear.	..
Means.	..	..	29.879	53.5	..	.213	65.6	..	..	..	..	..

November 27, 1891.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

[1891.]

Göttingen time.	Barometer.		Therm'm, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Saunre's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, eigh.
	Temperature, centigrade.	Obs'd height, millimètres.	Corr. height, inches.	Dry.	Wet.			Dir. points.	Force, lbs.			
23.	5.8	764.70	30.076	31.6	32.	.173	72.	NW.	..	..	A very little Ci s.	..
23.	6.6	765.35	30.096	33.	29.5	.146	74.9	NNW.	..	..	A very little Ci and Ci-s.	+
0.	6.8	765.45	30.100	31.3	31.	.139	77.5	NW.	..	..	Ci., Ci-s.	+
1.	6.6	765.90	30.120	30.	28.	.153	83.5	WNW.	..	..	Ci., Ci-s.	+
2.	6.1	766.30	30.137	30.7	30.2	.182	81.5	W. by N.	..	..	S. near horizon.	+
3.	5.9	766.00	30.127	30.	29.7	.176	81.2	W. by N.	..	..	..	+
Means.	..	..	30.109	31.6	..	.170	78.4	..	..	..	..	..
4.	5.6	766.30	30.140	29.9	27.2	.141	..	by N.	..	..	Clear.	..
5.	5.5	766.80	30.150	29.3	28.8	.173	81.2	W. by N.	..	..	S. in horizon.	+
6.	5.1	765.40	30.106	28.6	26.7	.146	88.8	W.	..	..	Cu-s.	+
7.	6.	765.70	30.113	28.5	26.5	.144	83.2	W.	..	..	..	..
8.	6.2	766.00	30.125	28.	26.4	.147	84.5	W.	..	..	..	..
9.	5.6	765.85	30.121	27.5	26.	.146	85.2	W.	..	..	A few thin clouds.	..
Means.	..	..	30.127	28.6	..	.149	84.6	..	..	..	..	..
10.	5.9	766.10	30.131	27.2	25.6	.142	84.	W.	..	..	Lightly overcast.	8
11.	5.	766.25	30.140	29.	26.5	.139	80.9	W.	..	..	Lightly overcast.	8
12.	5.	766.25	30.140	28.	26.	.141	88.2	W.	..	..	Cie., light N.	8
13.	4.6	766.15	30.136	28.4	26.1	.138	91.8	W.	..	..	Ci., Ci-s., Cu.	3
14.	5.3	766.45	30.147	31.4	28.3	.144	79.5	WSW.	..	..	Ci-cu., Ci. from NW.	7
15.	5.2	766.10	30.133	28.5	30.9	.166	88.5	SSW.	..	..	Ci-cu., Ci-s. from SW.	7
Means.	..	..	30.138	29.6	..	.145	82.1	..	..	..	..	..
16.	5.8	766.00	30.127	37.1	31.9	.146	..	SSW.	..	..	Cu., Ci., Ci-cu.	8
17.	6.	765.35	30.099	39.2	33.1	.138	77.5	SW.	..	..	Ci., Ci-cu., Ci-s. from SW.	3
18.	6.5	764.30	30.087	41.2	35.6	.162	72.2	SSW.	..	..	Ci., Ci-s. from SW.	2
19.	7.1	763.55	30.073	42.5	36.3	.161	70.5	..	..	..	Ci., Ci-s., S. from SW.	7
20.	8.	763.10	30.061	44.	35.8	.135	70.	SW.	..	..	Ci-cu., Ci. from SW.	1
31.	9.6	763.05	29.991	43.3	37.3	.172	70.	SW.	..	..	Light Ci.	4
Means.	..	..	30.050	41.2	..	.162	72.2	..	..	..	..	..

December 22, 24.] METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY. (1840.)

Göttingen time.	Barometer.			Therm'm, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gauss's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, &c.
	Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.				Dir. points.	Force, lbs.			
23.	1.8	763.80	30.020	27.5	34.	.114	.....	70.	WSW.	..	..	S., Ci., Ci.-s., Cu.	7
23.	2.1	762.50	30.006	25.5	22.9	.118	.....	70.9	WSW.	..	..	Ci.-s.	..
0.	1.7	761.30	29.957	23.7	22.	.122	.....	70.9	SSW.	..	..	Ci.-s.	..
1.	1.3	760.55	29.934	25.5	22.4	.110	.....	78.9	SW.	..	..	Ci.-s.	..
2.	1.	760.00	29.914	24.	22.4	.125	.....	80.	SSW.	..	..	C., Ci.-s.	..
3.	1.	758.80	29.858	24.4	24.	.145	.....	80.5	SSW.	..	..	Ci.-s. in Hor.	..
Means.	...	...	29.948	25.1	...	.122	.....	76.5	.....	..	..	Clear.	..
4.	0.9	757.30	29.808	27.5	24.1	.116	.....	76.	SSW.	..	..	Hazy, a few light clouds.	..
5.	0.7	756.50	29.777	28.2	25.	.123	.....	76.5	SSW.	..	..	Hazy, Ci., C.-s., Ci.-cu.	1
6.	1.	756.30	29.764	28.7	25.8	.131	.....	76.	SW.	..	..	Cu., N.	6
7.	0.9	756.35	29.771	29.2	26.6	.138	8h. 40m.	73.5	SW.	..	..	N.	8
8.	1.	756.40	29.772	29.7	27.5	.148	(D. 21.9)	72.8	WSW.	..	..	N.	7
9.	1.	756.35	29.770	28.6	27.	.151	(A. 29.1)	71.2	WSW.	..	..	N.	..
Means.	...	...	29.777	28.6	...	.134	.....	74.3	.....	..	..	N.	..
10.	0.9	755.95	29.756	28.9	25.	.116	.....	71.9	WSW.	..	..	N. Cu.	2
11.	0.9	755.65	29.744	28.	24.5	.117	.....	71.2	SW. by W.	..	..	N. Cu.	1
12.	0.8	756.65	29.783	28.3	26.	.138	.....	71.8	WSW.	..	..	Cu.	3
13.	1.3	757.15	29.800	29.3	28.	.160	14h. 40m.	71.8	WSW.	..	..	Cu., Ci.	2
14.	1.5	757.55	29.816	30.2	29.2	.170	(D. 19.8)	70.5	WSW.	..	..	Ci. cu., Cu.-s.	7
15.	1.4	758.10	29.837	31.8	27.3	.123	(A. 33.3)	71.	W.	..	..	Cu. cu., Cu.-s.	..
Means.	...	...	29.789	29.4	...	.137	.....	71.4	.....	..	..	Cu., Ci.-cu. from NW.	..
16.	1.6	758.60	29.856	32.	28.5	.131	.....	70.7	W.	..	..	Ci.-cu., Cu.	7
17.	2.3	758.15	29.835	34.5	29.6	.134	.....	71.	W.	..	..	Ci.-cu., Cu. from WNW.	6
18.	2.8	757.90	29.823	34.4	30.	.149	.....	72.5	W.	..	..	Ci.-cu., Cu. from WNW.	7
19.	3.	757.80	29.818	34.3	30.3	.148	20h. 40m.	73.	W.	..	..	Ci.-cu., Cu. from WNW.	7
20.	4.	750.00	29.821	34.5	31.5	.166	(D. 22.)	73.	W.	..	..	Ci.-cu., Cu. from WNW.	6
21.	4.5	758.50	29.838	34.4	29.7	.137	(A. 34.3)	70.5	W. by N.	..	..	Ci.-cu., Cu. from WNW.	7
Means.	29.832	34.2143	71.8	Ci.-cu., Cu. from WNW.	..

Jan 22, 23.]

METEOROLOGICAL TERM DAY.

[1840.

[97]

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A. m.	Göttingen time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saunere's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, Stds.
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
6 25	21.8	758.65	29.760	64.2	62.7	.555	.....	87.	SW. by S.	..	..	Ci., Cu.	6
7 25	22.1	758.85	29.767	68.3	66.	.613	9h.: ..	85.	SSW.	..	..	Ci., Cu. from SW.	7
8 25	22.6	758.85	29.765	71.2	68.4	.659	(D. 60.) ..	85.	SW.	..	..	S., Cu., Ci.-cu. from WSW.	7
9 25	23.2	759.00	29.767	72.6	68.6	.651	(A. —.) ..	82.5	SW. by S.	..	..	S., Ci. from WSW.	5
10 25	24.4	759.35	29.775	72.7	70.7	.722	.....	81.5	SW.	..	..	Ci.-a.	8
11 25	26.	759.45	29.772	76.2	71.7	.718	.....	76.5	WSW.	..	..	Ci., Ci. s. from W.	6
Means	29.768	70.9	.....	.653	.....	82.9	.....	..	..	.....	..
12 25	26.7	759.50	29.770	80.2	71.5	.664	.....	73.5	WSW.	..	..	Ci., Cu. from W.	6
13 25	27.7	759.45	29.763	81.6	72.3	.681	15h.: ..	71.2	W. by N.	..	..	Ci.-cu., Cu. from W.	7
14 25	28.6	759.40	29.757	83.	71.2	.633	(D. 61.5) ..	69.	WNW.	..	..	Ci.-cu., Cu. from W.	6
15 25	29.	759.65	29.765	83.7	71.1	.614	(A. —.) ..	67.5	WNW.	..	..	Ci., Ci.-s., Cu.	6
16 25	29.	759.95	29.777	83.	71.6	.633	.....	67.5	W. by N.	..	..	Ci.-a., Cu.	7
17 25	28.9	760.30	29.791	82.	72.6	.687	.....	70.5	W.	..	..	Ci.-s., Cu.	7
Means	29.770	82.2	.....	.650	.....	69.9	.....	..	..	.....	..
18 25	23.5	760.70	29.966	81.6	72.8	.696	.....	71.5	W.	..	..	Ci.-cu.	7
19 25	27.6	761.35	29.839	79.5	72.7	.718	21h.: ..	72.	W.	..	..	Ci.-a., Cu., Ci.	8
20 25	27.	761.85	29.861	77.7	71.	.560	(D. 63.) ..	72.5	NW.	..	..	Cu., Ci.-cu.	4
21 25	25.5	762.15	29.879	74.5	66.9	.673	(A. —.) ..	74.5	N. by E.	..	..	Clear.	2
22 25	25.5	762.75	29.903	72.6	66.1	.587	.....	76.	NNE.	..	..	Ci.-a.	2
23 25	25.	763.85	29.910	71.9	65.7	.563	.....	78.	NNE.	..	..	.....	..
Means	29.893	76.3	.....	.613	.....	74.1	.....	..	..	.....	..
0 25	24.5	763.00	29.918	70.3	64.5	.640	.....	79.6	NNE.	..	..	N.	5
1 25	24.8	763.40	29.933	67.5	63.	.528	3h.: ..	81.8	NNE.	..	..	Misty, some Cu.	3
2 25	24.8	763.70	29.941	67.3	62.1	.500	(D. 57.8) ..	81.	NNE.	..	..	Ci., Cu.	3
3 25	24.7	763.90	29.957	67.	61.7	.495	(A. —.) ..	81.6	NNE.	..	..	Ci., Cu. and S.	2
4 25	24.1	764.55	29.981	65.9	61.1	.487	.....	81.5	NNE.	..	..	Ci., Cu., Cu.-s.	7
5 25	23.8	764.75	29.990	65.4	60.7	.483	.....	82.3	NNE.	..	..	Cu., Ci.	6
Means	29.954	67.2	.....	.505	.....	81.3	.....	..	..	.....	6

July 21, 22.]

METEOROLOGICAL TERM DAY

[1860.

A. m.	Gottengen time.	Barometer.			Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Beaumont's.	Wind.		Rain, inches	Clouds, &c.	Sky covered, 8ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6	25	20.7	765.00	30.016	62.4	66.1	.388	...	78.2	NW by W.	...	...	Clear.	...
7	25	21.4	765.35	30.026	66.1	59.1	.430	9h.: (D. 53.)	75.3	NW by W.	...	...	Clear.	...
8	25	21.7	765.50	30.030	69.6	59.4	.399	(A. —)	71.	WNW.	...	...	Clear.	...
9	25	23.	765.60	30.028	72.3	61.5	.429	...	69.	WNW.	...	...	Clear.	...
10	25	23.5	765.95	30.039	73.5	62.	.430	...	68.5	WNW.	...	...	Clear.	...
11	25	24.5	765.75	30.027	75.2	63.3	.451	...	68.	WSW.	...	...	A few light Cu. in W., hazy.	...
Means	...	...	...	30.027	69.8	...	.431	...	71.7	...	...	...	...	...
12	25	25.	765.50	30.014	77.4	64.4	.459	...	66.5	WSW.	...	...	A few Cu. floating.	...
13	25	25.6	765.50	30.011	78.5	61.5	.460	10h.: (D. 53.)	66.	WSW.	...	...	Cu., Ci-cn. from NNW.	...
14	25	26.5	765.45	30.005	79.	64.8	.454	(A. —)	64.5	W.	...	...	Cu., Ci-cn. from N.	...
15	25	27.	765.15	29.990	80.4	64.4	.426	...	63.5	WSW.	...	...	Cu., Ci-cn. from NW.	...
16	25	27.5	765.10	29.996	80.8	66.4	.485	...	64.5	WSW.	...	...	Cu., Ci-cn. from NW.	...
17	25	28.	765.00	29.980	78.5	67.	.530	...	67.	WSW.	...	...	Hazy, no clouds.	...
Means	...	...	...	29.998	79.1	...	.467	...	65.2	...	...	...	...	...
18	25	26.6	765.15	29.992	75.6	65.6	.518	...	70.5	SW by S.	...	...	Hazy, no clouds.	...
19	25	25.3	765.25	30.003	71.9	65.	.540	2 1/2 h.: (D. 59.)	77.5	SW.	...	...	Very hazy.	...
20	25	23.7	765.30	30.012	69.5	64.5	.551	(A. —)	82.2	SW.	...	...	Very hazy.	...
21	25	22.1	765.30	30.020	67.5	64.	.558	...	82.1	SW.	...	...	Clear.	...
22	25	21.	765.40	30.030	65.8	63.	.547	...	87.	SW.	...	...	Clear.	...
23	25	20.6	765.45	30.033	64.5	63.5	.546	...	89.5	SW.	...	...	Clear.	...
Means	...	...	...	30.015	69.1	...	.543	...	81.5	...	...	...	...	...
0	25	19.5	765.50	30.041	62.2	61.1	.531	...	91.5	SW.	...	...	Clear.	...
1	25	21.7	765.70	30.038	64.	62.	.537	3h.: (D. 51.5)	88.7	SW.	...	...	Clear.	...
2	25	22.2	765.80	30.039	62.	60.3	.509	(A. —)	90.1	NNW.	...	...	Clear.	...
3	25	22.	765.90	30.045	61.1	59.4	.494	...	90.7	NNW.	...	...	Clear.	...
4	25	21.9	766.05	30.051	60.6	59.4	.500	...	91.3	NNW.	...	...	Clear.	...
5	25	21.7	766.85	30.064	60.7	60.	.515	...	93.2	NNW.	...	...	Clear.	...
Means	...	...	...	30.046	61.8	...	.514	...	90.9	...	...	...	...	...

August 31, 23.]

METEOROLOGICAL TERM DAY.

[1840.

[97]

h. m.	Göttingen time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6 25	...	23.2	764.00	29.964	68.9	67.6	.658	...	91.7	SSW.	...	...	Cl., Ci-s.	1
7 25	3h.	...	SSW.	...	...	...	...
8 25	...	24.7	764.10	29.961	74.3	71.1	.718	(D. 66.5)	88.5	S.	...	...	Cl., Ci-s., Cu.	4
9 25	...	25.6	764.20	29.960	76.8	73.1	.762	...	88.4	SW.	...	...	Cu., Ci.	5
10 25	...	26.5	764.50	29.968	78.7	74.2	.782	...	88.3	SW.	...	...	Cu., N.	6
11 25	...	27.5	764.50	29.963	80.7	74.6	.776	...	84.7	SW.	...	...	Cu., N.	6
Means	29.963	75.9	...	.739	...	88.3	...	...	...	...	...
12 25	...	28.8	764.35	29.953	82.	74.	.738	...	82.	SSW.	...	...	N., Cu.	5
13 25	...	29.	763.80	29.928	83.4	74.7	.750	15h.	79.5	SSW.	...	...	N., Cu.	5
14 25	...	29.5	763.70	29.922	83.7	75.4	.774	(D. 69.5)	79.1	SW.	...	...	N., Cu.	6
15 25	...	29.5	763.50	29.914	83.5	75.5	.780	...	80.3	SW.	...	...	N., Cu., Ci-s.	6
16 25	...	30.5	763.40	29.904	86.	76.8	.804	...	79.	SSW.	...	...	Cu., Ci-cu.	5
17 25	...	30.	763.35	29.905	84.5	76.2	.796	...	79.5	SW.	...	...	Cu., N.	1
Means	29.921	83.8	...	.774	...	79.9	...	...	...	...	...
18 25	...	27.7	763.10	29.906	77.8	73.4	.763	...	87.1	SW.	...	...	Ci-cu., Ci-s.	3
19 25	...	26.2	763.15	29.916	74.9	72.4	.769	21h.	90.9	SW.	...	...	A few thin Cu. and Ci-cu.	...
20 25	...	27.8	763.50	29.922	73.8	70.6	.706	(D. 64.)	91.	S.	...	...	Clear.	...
21 25	S.	...	...	...	...
22 25	...	27.	763.60	29.930	71.3	69.	.679	...	90.2	S.	...	...	Clear.	...
23 25	...	26.3	763.75	29.939	70.6	69.2	.693	...	92.7	S.	...	...	Clear.	...
Means	29.923	73.7	...	.720	...	90.4	...	...	...	...	...
0 25	...	26.1	763.50	29.930	71.2	69.6	.700	...	91.8	S.	...	...	Clear.	...
1 25	...	25.9	763.40	29.927	74.3	71.	.715	3h.	87.4	S.	...	...	Clear.	...
2 25	...	24.5	762.95	29.917	70.6	69.	.666	(D. 66.)	92.3	S.	...	...	Clear.	...
3 25	...	23.5	762.85	29.917	70.6	69.2	.693	...	93.5	S.	...	...	Clear.	...
4 25	...	22.9	763.00	29.926	69.9	68.5	.676	...	94.1	S.	...	...	Ci., Cu.	4
5 25	...	23.4	763.65	29.949	70.9	69.4	.697	...	92.8	S.	...	...	Lightly overcast.	4
Means	29.928	71.2	...	.694	...	92.	...	...	...	...	8

SEPTEMBER 21, 1911

METEOROLOGICAL FORM DAY.

[1911]

y. m.	Göttingen time.	Barometer.			Thermos. Fahr.		Force of vapour, ins.	Dew point, Fahr.	Hygr., Gaussen's	Wind.		Rain, inches.	Clouds, &c.	Sky covered, etc.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6	25	15.5	757.25	29.735	49.4	44.8	.261	.....	82.7	NW.	..	..	Clear.	..
7	25	15.7	758.10	29.768	50.1	45.1	.260	9h.	78.4	NW.	..	..	Clear.	..
8	25	15.2	759.00	29.805	50.7	43.7	.223	(D. 34.)	75.	NW.	2	..	A few Cu. near Hor.	..
9	25	15.3	759.50	29.825	52.5	44.8	.226	.....	73.5	NW.	2	..	A few Cu. and Ci-cu. from NW.	..
10	25	15.6	759.65	29.829	53.5	45.	.219	.....	72.5	NW.	3	..	Cu. in Hor.	1
11	25	15.5	759.80	29.835	51.2	45.6	.225	.....	71.	NW.	3	..	Cu., Ci-cu. from NW.	2
Means.	.....	.....	.....	29.799	51.7	.....	.236	.....	75.5	.....	..	..	.....	..
12	25	15.8	760.00	29.842	55.	46.5	.236	.....	71.	NW.	2	..	Cu., Ci-cu. from NW.	2
13	25	15.3	760.15	29.851	57.	47.5	.237	15h.	69.6	NW.	1	..	Cu., Ci-cu., Ci-s.	3
14	25	16.2	760.55	29.863	57.2	47.7	.239	(D. 29.7)	68.5	NW.	2	..	Cu., Ci-cu., Cu-s. from NW.	3
15	25	15.2	760.75	29.875	56.6	46.6	.220	.....	68.5	NW.	2	..	Cu., Ci-cu., Cu-s. from NW.	3
16	25	18.9	761.85	29.900	56.4	46.	.209	.....	67.6	NW.	2	..	Cu., Ci-cu., Cu-s. from NW.	1
17	25	18.5	762.75	29.937	54.8	46.5	.238	.....	67.	NW. by N.	..	..	Clear.	..
Means.	.....	.....	.....	29.878	56.2	.....	.230	.....	68.7	.....	..	..	.....	..
18	25	18.1	763.10	29.953	48.6	43.1	.232	.....	76.1	NW.	..	..	Thin Ci-s in Hor.	..
19	25	17.3	764.50	30.012	46.4	41.9	.232	21h.	78.	NNW.	..	..	Cu. in NW, aurora.	..
20	25	16.4	765.00	30.036	45.5	40.7	.217	(D. 28.5)	78.3	N.	..	..	Cu. in N, aurora.	..
21	25	15.2	766.00	30.081	42.3	39.1	.220	.....	78.5	N.	..	..	Clear.	..
22	25	15.2	766.20	30.091	40.3	37.1	.203	.....	78.5	N.	..	..	Clear.	..
23	25	14.9	766.70	30.110	37.	35.	.200	.....	84.5	N.	..	..	Clear.	..
Means.	.....	.....	.....	30.047	43.3	.....	.217	.....	78.8	.....	..	..	.....	..
0	25	13.9	766.85	30.122	37.6	37.2	.213	.....	85.9	N.	..	..	Clear.	..
1	25	13.6	767.30	30.140	37.5	36.5	.223	3h.	93.3	N.	..	..	Clear.	..
2	25	13.	767.45	30.149	37.9	36.5	.218	(D. 31.5)	92.1	N.	..	..	Clear.	..
3	25	12.4	767.95	30.172	37.	35.2	.203	.....	93.2	N. by W.	..	..	Clear.	..
4	25	12.1	768.30	30.187	34.7	33.9	.204	.....	95.1	N by W.	..	..	Clear.	..
5	25	12.3	769.05	30.216	35.	34.1	.205	.....	94.	N. by W.	..	..	Clear.	..
Means.	.....	.....	.....	30.164	36.6	.....	.211	.....	92.3	.....	..	..	.....	..

October 21, 22.]

METEOROLOGICAL TERM DAY.

[1840.

[97]

182

A. m.	Göttingen time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Gauges's	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6 25.	19.1	761.70	29.893	56.	64.7	435	93.1	NE.	..	..	..	N.	..	8
7 25.	18.5	761.45	29.886	55.	54.5	429	93.5	NE. by E.	..	..	..	N.	..	8
8 25.	18.5	760.95	29.867	56.	56.3	439	91.	E. by N.	..	..	.01	N., raining.	..	8
9 25.	18.3	761.00	29.869	56.6	56.8	446	90.	E. by N.	..	..	.01	N.	..	8
10 25.	18.	760.30	29.844	56.	55.4	441	91.	ENE.	..	..	..	N., raining	..	8
11 25.	17.9	759.25	29.803	56.5	55.9	449	91.	NE. by E.	..	..	..	N., raining.	..	8
Means	..	..	29.860	55.8	..	440	91.6	..	..	..	..	..	..	..
12 25.	17.9	758.30	29.766	57.	56.6	463	92.	NE.	..	..	..	Very fine mist	..	8
13 25.	17.9	757.35	29.729	57.5	57.	467	91.	NE.	..	..	..	Thick fog.	..	8
14 25.	18.	756.50	29.694	58.5	57.8	478	91.5	NE.	..	..	..	Fine rain.	..	8
15 25.	17.9	756.05	29.677	58.5	58.1	487	91.5	NE.	..	..	.01	Fine rain.	..	8
16 25.	18.	755.55	29.657	58.5	58.2	490	91.4	NE.	..	..	.02	N., raining.	..	8
17 25.	18.2	755.15	29.641	58.	57.5	475	93.	NE.	..	..	.02	N., raining.	..	8
Means	..	..	29.684	58.	..	477	91.7	..	..	..	..	..	..	..
18 25.	18.4	754.60	29.620	58.	57.8	484	94.	NE.	..	..	.01	N.	..	8
19 25.	18.5	754.15	29.601	58.	57.7	482	93.3	NE.	..	..	..	N., raining.	..	8
20 25.	18.5	754.20	29.603	57.5	57.	467	94.	NW. by N.	..	..	.03	N., raining.	..	8
21 25.	18.5	753.85	29.589	57.7	57.2	471	93.2	NW. by N.	..	..	.01	N., raining.	..	8
22 25.	18.7	753.00	29.555	57.2	57.	471	94.1	NW. by N.	..	..	.11	N., raining.	..	8
23 25.	18.7	752.80	29.548	57.1	56.6	468	93.	NW. by N.	..	..	.01	N.	..	8
Means	..	..	29.586	57.6	..	472	93.6	..	..	..	..	..	..	..
0 25.	18.7	752.85	29.550	56.4	56.	454	92.9	NW.	..	..	..	N.	..	8
1 25.	18.5	753.05	29.557	56.2	55.5	442	92.4	NW.	..	..	..	N.	..	8
2 25.	18.4	753.20	29.564	56.6	55.8	446	92.2	NW.	..	..	..	N.	..	8
3 25.	18.3	753.00	29.556	57.5	55.7	433	89.9	NW. by W.	..	..	..	N.	..	8
4 25.	18.	753.90	29.693	57.	53.	370	83.9	NNW.	4	..	..	N.	..	8
5 25.	17.	755.75	29.672	53.7	49.	308	79.8	NNW.	3	..	..	Ca., N.	..	8
Means	..	..	29.582	56.2	..	409	88.5	..	..	..	..	..	..	..

NOVEMBER 21, 22.]

METEOROLOGICAL TERM DAY

[1840.

Göttingen time. A. m.	Barometer.			Therm'm, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Beaumont's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, &c.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6 25.....	4.3	766.15	30.140	23.5	23.5	.147	.....	95.9	N. by E.	..	..	Cl., Cl-cu.....	..
7 25.....	4.	766.75	30.166	25.8	25.5	.165	9A.:.....	93.5	N. by E.	..	..	Cl-cu., Cl-a., Cu-a.....	7
8 25.....	4.8	767.10	30.175	29.2	28.4	.167	(D. 25.).....	92.	N. by E.	..	..	Cl-cu., S.....	8
9 25.....	4.	766.90	30.172	33.	31.	.172	(A. 30.6).....	85.	N. by E.	..	..	Cl-cu., N., Cu-a., S.....	8
10 25.....	4.5	767.00	30.172	36.1	31.8	.154	.....	80.	N. by E.	..	..	Cl-cu., N., and hazy.....	8
11 25.....	4.8	766.60	30.156	38.4	33.	.145	.....	74.	N. by E.	..	..	Cl-cu., Cu a.....	7
Means.....	.....	.....	30.163	31.	.....	.157	.....	86.7	.....	..	..	.....	..
12 25.....	5.3	766.00	30.129	38.5	34.2	.165	.....	76.	W.	..	..	Cl-cu., N., Cu-a.....	8
13 25.....	6.	765.50	30.105	40.8	35.7	.175	15h.:.....	74.5	W. by S.	..	..	Cl-cu., Cl-a., Cu-a. from WNW.....	6
14 25.....	6.8	765.50	30.102	39.8	35.3	.173	(D. 23.).....	74.5	SW.	..	..	Cl-cu., Cl-a., Cu-a. from WNW.....	6
15 25.....	6.6	765.40	30.098	38.5	34.7	.176	(A. 39.).....	76.	SW.	..	..	Cl-cu., Cl-a., Cu-a. from WNW.....	5
16 25.....	6.6	765.20	30.090	37.5	33.2	.159	.....	75.5	SW.	..	..	Cl., Cl-cu., Cu-a.....	4
17 25.....	7.5	765.45	30.097	36.5	32.5	.157	.....	79.1	E. by N.	..	..	Cl., Cl-cu., Cu-a.....	1
Means.....	.....	.....	30.103	38.5	.....	.167	.....	75.9	.....	..	..	.....	..
18 25.....	7.3	766.00	30.120	36.	32.7	.167	.....	80.4	E. by N.	..	..	Overcast, dark.....	8
19 25.....	6.7	765.65	30.108	33.7	31.2	.169	2 1/2h.:.....	83.4	E. by N.	..	..	Cl-cu., Cu-a.....	2
20 25.....	7.5	766.15	30.125	33.6	31.8	.180	(D. 27.3).....	84.5	E. by N.	..	..	Cl-cu.....	1
21 25.....	7.3	765.05	30.082	32.5	31.5	.186	(A. 32.6).....	88.4	E. by N.	..	..	Cu-a.....	1
22 25.....	7.	764.55	30.065	31.5	30.5	.179	.....	91.4	E.	..	..	Cu-a.....	1
23 25.....	6.1	764.30	30.058	32.6	31.	.176	.....	88.9	E.	..	..	N.....	1
Means.....	.....	.....	30.093	33.3	.....	.176	.....	86.2	.....	..	..	.....	..
0 25.....	5.8	763.65	30.034	30.	29.	.169	.....	92.7	E.	..	..	Lightly overcast.....	8
1 25.....	5.	763.40	30.022	31.	30.	.176	3h.:.....	92.	E.	..	..	Cl., Cl-a., N.....	8
2 25.....	5.5	763.95	30.008	31.4	30.2	.175	(D. 28.4).....	94.	E.	..	..	Cl., Cl-a., N.....	8
3 25.....	5.1	763.50	29.992	31.7	30.3	.174	(A. 31.5).....	92.8	ENE.	..	..	Cl., Cl-a., N.....	8
4 25.....	5.2	762.20	29.979	32.6	31.3	.181	.....	93.3	ENE.	..	..	Cl., Cl-a., N.....	8
5 25.....	4.9	763.00	29.972	33.1	32.	.188	.....	95.9	ENE.	..	..	Cl., Cl-cu., Cl-a., N.....	8
Means.....	.....	.....	30.001	31.6	.....	.177	.....	93.4	.....	..	..	.....	..

SEPTEMBER 23, 24.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

[1840.]

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Göttingen time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauss's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Forc, lbs.			
22.....	20.	767.20	30.104	69.	56.4	.323	.....	61.6	W.	..	..	Clear.....	..
23.....	20.5	767.30	30.106	63.6	55.5	.359	.....	68.9	W.	..	..	Clear.....	..
0.....	20.	767.25	30.106	57.7	52.3	.343	.....	74.1	W.	..	..	Clear.....	..
1.....	19.8	767.75	30.128	51.	50.7	.345	2h. 40m.	82.	W.	..	..	Clear.....	..
2.....	19.6	768.00	30.139	53.5	49.9	.331	(D. 43.)	84.	W.	..	..	Clear.....	..
3.....	19.5	768.00	30.140	50.	48.9	.348	.....	91.9	W.	..	..	Clear.....	..
Means.....	.....	.....	30.120	58.	.....	.341	.....	77.1	.....	..	..	.....	..
4.....	19.4	768.05	30.141	47.5	46.9	.329	.....	93.	W.	..	..	Clear.....	..
5.....	18.9	768.05	30.144	49.4	47.5	.321	.....	90.1	W.	..	..	Clear.....	..
6.....	18.5	768.50	30.164	53.	48.7	.320	.....	86.2	NNW.	..	..	Clear.....	..
7.....	18.2	768.55	30.165	51.	48.5	.327	8h. 40m.	89.2	NNW.	..	..	Clear.....	..
8.....	17.8	768.60	30.171	51.	48.4	.322	(D. 38.)	88.9	NNW.	..	..	Clear.....	..
9.....	16.7	768.80	30.184	49.8	47.7	.321	.....	90.8	NNW.	..	..	Clear.....	..
Means.....	.....	.....	30.161	50.1	.....	.323	.....	89.7	.....	..	..	.....	..
10.....	16.8	769.05	30.193	48.5	47.	.320	.....	92.8	NNW.	..	..	Clear.....	..
11.....	16.7	769.75	30.221	48.3	46.7	.315	.....	92.7	NNW.	..	..	Clear.....	..
12.....	16.2	770.25	30.242	48.1	46.7	.317	.....	92.9	NNW.	..	..	Clear.....	..
13.....	16.3	770.70	30.259	53.9	51.2	.358	.....	89.2	NNW.	..	..	Clear.....	..
14.....	17.5	771.00	30.265	57.7	54.6	.402	.....	82	NE.	..	..	No clouds, hazy.....	..
15.....	17.3	771.20	30.275	61.1	55.6	.388	.....	80.5	ENE.	..	..	No clouds, hazy.....	..
Means.....	.....	.....	30.242	52.9	.....	.350	.....	86.8	.....	..	..	.....	..
16.....	18.	771.50	30.283	63.	57.	.405	.....	79.5	ENE.	..	..	No clouds, hazy.....	..
17.....	18.5	771.50	30.280	64.4	57.	.389	.....	77.7	ENE.	..	..	No clouds, hazy.....	..
18.....	19.5	771.10	30.260	65.5	58.	.404	.....	76.	ENE.	..	..	A few small Cu. in Hor.....	..
19.....	20.	770.85	30.247	67.2	58.6	.402	20h. 40m.	74.	ENE.	..	..	A few small Cu. in Hor.....	..
20.....	21.8	770.60	30.229	69.	60.	.421	(D. 50.)	72.	E.	..	..	A few small Cu. in Hor.....	..
21.....	22.5	770.70	30.229	69.7	60.	.413	.....	72.	E by N.	..	..	A few small Cu. in Hor, hazy.....	..
Means.....	.....	.....	30.255	66.5	.....	.406	.....	75.2	.....	..	..	.....	..

October 21, 22.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

[1840.]

y.	Göttingen time.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Danvers's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
22.	18.2	755.55	29.657	58.5	58.2	.490	.....	91.4	NE.	..	..	N., raining.	8
23.	18.3	755.15	29.641	58.	57.5	.475	.....	98.	NE.	..	.02	N., raining.	8
0.	18.4	754.60	29.620	58.	57.8	.484	.....	94.	NE.	..	.01	N., ..	8
1.	18.5	754.15	29.601	58.	57.7	.482	.....	93.3	NE.	..	..	N., raining.	8
2.	18.5	754.20	29.603	57.5	57.	.467	.....	94.	NW. by N.	..	.03	N., raining.	8
3.	18.5	753.85	29.569	57.7	57.2	.471	.....	93.2	NW. by N.	..	.01	N., raining.	8
Means.	29.618	57.9	.....	.478	.....	93.1	.....	..	..	.....	.....
4.	18.7	753.00	29.555	57.2	57.	.471	.....	94.1	NW. by N.	..	.11	N., raining.	8
5.	18.7	752.80	29.547	57.1	56.5	.468	.....	93.	NW. by N.	..	.01	N., ceased raining.	8
6.	18.7	752.85	29.550	56.4	56.	.454	.....	92.9	NW.	..	..	N., ..	8
7.	18.5	753.05	29.557	56.2	55.5	.442	.....	92.4	NW.	..	..	N., ..	8
8.	18.4	753.20	29.564	56.6	55.8	.446	.....	92.2	NW.	..	..	N., ..	8
9.	18.3	753.00	29.555	57.5	55.7	.433	.....	89.9	NW.	..	..	N., ..	8
Means.	29.555	56.8	.....	.451	.....	92.4	.....	..	..	.....	.....
10.	18.	753.90	29.693	57.	53.	.370	.....	83.9	NNW.	4	..	N., ..	8
11.	17.	755.75	29.670	53.7	49.	.308	.....	79.8	NNW.	3	..	Cu., N.	8
12.	16.6	756.70	29.710	50.9	45.6	.262	.....	78.	NNW.	4	..	Cu., N.	7
13.	16.1	757.90	29.759	50.5	44.8	.248	.....	75.4	NNW.	7	..	Cl., Cu.	1
14.	16.	759.25	29.811	51.	44.7	.240	.....	74.	NNW.	3	..	Cu., Ci-cu. from N.	1
15.	15.	759.85	29.835	51.3	44.3	.229	.....	71.	NNW.	3	..	Cu., Ci-cu. from NW.	1
Means.	29.730	52.4	.....	.376	.....	77.	.....	..	..	.....	.....
16.	15.	760.25	29.866	51.6	44.	.319	.....	69.	NNW.	3	..	Cu., Ci-cu. from N.	2
17.	14.7	760.50	29.868	52.5	45.3	.237	.....	69.	NNW.	2	..	Cu., Ci-cu. from NNW.	3
18.	14.6	760.45	29.866	53.6	45.2	.223	.....	67.	NNW.	2	..	A few scattered Cu.	..
19.	14.6	760.50	29.868	54.	45.	.213	.....	66.	NNW.	2	..	Clear.	..
20.	15.	761.40	29.901	54.4	44.3	.194	.....	63.	NNW.	2	..	Clear.	..
21.	15.3	761.75	29.914	54.7	44.5	.195	.....	61.5	NNW.	..	..	Clear.	..
Means.	29.879	53.6	.....	.213	.....	65.6	.....	..	..	.....	.....

Göttingen time.	Barometer.			Therm'n, Fnh.		Force of vapor, ins.	Dew point, Fnh. (Göttingen time.)	Hygr., Göttingen's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, &th.
	Temperature, centigrade.	Obs'd height, millimètres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
4.													
23.	5.8	764.70	30.076	31.6	32.	178		72.9	NW.			A very little Ci-s.	..
23.	6.6	765.35	30.096	29.5	29.5	146		74.9	NNW.			A very little Ci. and Ci-s.	..
0.	6.3	765.45	30.100	31.3	31.	189		77.5	NW.			Ci., Ci-s.	..
1.	6.5	765.90	30.120	30.	28.	153	24.40m.	83.5	WNW.			Ci., Ci-s.	..
2.	6.1	766.30	30.137	30.7	30.2	182	(D. 28.)	81.6	W. by N.			S. near horizon.	..
3.	6.9	766.00	30.127	30.	29.7	176		81.2	W. by N.				..
Means			30.109	31.6	...	170		78.4					..
4.	5.6	766.30	30.140	29.9	27.2	141		...	by N.			Clear.	..
5.	5.5	766.80	30.160	29.3	28.8	173		81.2	W. by N.			S. in horizon.	..
6.	5.1	765.40	30.106	28.6	26.7	146		88.8	W.			Cu-s.	..
7.	6.	765.70	30.113	28.5	26.5	144	84.40m.	83.2	W.				..
8.	6.2	766.00	30.125	28.	26.4	147	(D. 23.1)	84.5	W.			A few thin clouds.	..
9.	5.9	765.85	30.121	27.5	26.	146	(A. 28.)	85.2	W.				..
Means			30.127	28.6	...	149		84.6					..
10.	5.9	766.10	30.131	27.2	25.6	142		84.	W.			Lightly overcast.	8
11.	5.	766.25	30.140	29.	26.5	139		80.9	W.			Lightly overcast.	8
12.	5.	766.25	30.140	28.	26.	141		83.2	W.			Ci-s, light N.	8
13.	4.6	766.15	30.138	28.4	26.1	138	144.40m.	81.8	W.			Ci., Ci-s, Cir.	3
14.	5.3	766.45	30.147	31.4	28.3	144	(D. 20.5)	79.5	WSW.			Ci-cu, Ci. from NW.	7
15.	5.2	766.10	30.133	33.5	30.9	166		83.5	SSW.			Ci-cu, Ci-s from SW.	7
Means			30.136	29.6	...	145		82.1					..
16.	5.8	766.00	30.127	37.1	31.9	146		77.5	SSW.			Cu., Ci., Ci-cu.	8
17.	6.	765.35	30.099	39.2	33.1	136		72.8	SW.			Ci., Ci-cu, Ci-s from SW.	8
18.	6.5	764.30	30.057	41.2	35.6	162		72.2	SSW.			Ci., Ci-s from SW.	2
19.	7.1	763.55	30.033	42.5	36.3	161	204.40m.	70.5	SW.			Ci., Ci-s, S. from SW.	7
20.	8.	763.10	30.001	44.	35.8	135	(D. 23.5)	70.	SW.			Ci-cu, Ci. from SW.	1
21.	9.6	763.05	29.991	43.3	37.3	172		70.	SW.			Light Ci.	4
Means			30.060	41.2	...	152		72.2					..

Göttingen time.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
22.	1.8	762.80	30.020	27.5	24.	.114	...	70.	WSW.	...	...	S. Ci., Ci.-s., Cu.	7
23.	2.1	762.50	30.006	25.5	22.9	.118	...	70.9	WSW.	...	...	Ci.-s.	...
24.	1.7	761.30	29.957	23.7	22.	.122	...	79.	SSW.	...	...	Ci.-s.	...
1.	1.3	760.55	29.934	25.5	22.4	.110	...	78.9	SW.	...	...	Ci.-s.	...
2.	1.	760.00	29.914	24.	22.4	.125	...	80.	SSW.	...	...	Ci., Ci.-s.	...
3.	1.	758.60	29.868	24.4	24.	.145	...	80.5	SSW.	...	...	Ci.-s. in Hor.	...
Means.	...	...	29.948	25.1	...	.122	...	76.5	...	...	...	...	...
4.	0.9	757.30	29.809	27.5	24.1	.116	...	76.	SSW.	...	...	Clear.	...
5.	0.7	756.50	29.777	28.2	25.	.123	...	76.5	SSW.	...	...	Hazy, a few light clouds.	...
6.	1.	756.20	29.764	28.7	25.3	.131	...	76.	SW.	...	...	Hazy, Ci., C.-s., Ci.-cu.	1
7.	0.9	756.35	29.771	29.2	26.6	.138	8h. 40m.	73.5	SW.	...	...	Cu., N.	6
8.	1.	756.40	29.772	29.7	27.5	.148	(D. 21.9)	72.8	WSW.	...	...	N.	8
9.	1.	756.35	29.770	28.6	27.	.151	(A. 29.1)	71.2	WSW.	...	...	N.	7
Means.	...	...	29.777	28.6	...	.134	...	74.3	...	...	...	...	...
10.	0.9	755.95	29.756	28.9	25.	.116	...	71.9	WSW.	...	...	N.	2
11.	0.9	755.65	29.744	28.	24.5	.117	...	71.2	SW. by W.	...	...	N. Cu.	1
12.	0.8	756.65	29.783	28.3	26.	.138	...	71.8	WSW.	...	...	Cu.	3
13.	1.3	757.15	29.800	29.3	28.	.160	14h. 40m.	71.8	WSW.	...	...	Cu., Ci.	2
14.	1.5	757.55	29.816	30.2	29.2	.170	(D. 19.8)	70.5	WSW.	...	...	Ci. cu., Cu.-s.	7
15.	1.4	758.10	29.837	31.8	27.3	.123	(A. 33.2)	71.	W.	...	...	...	...
Means.	...	...	29.789	29.4	...	.137	...	71.4	...	...	...	...	...
16.	1.6	758.60	29.856	32.	28.5	.131	...	70.7	W.	...	...	Cu., Ci.-cu. from NW.	7
17.	2.3	758.15	29.835	34.5	29.6	.134	...	71.	W.	...	...	Ci.-cu., Cu. from WNW.	6
18.	2.8	757.90	29.823	34.4	30.	.143	...	72.5	W.	...	...	Ci.-cu., Cu. from WNW.	7
19.	3.	757.80	29.818	34.3	30.3	.148	20h. 40m.	73.	W.	...	...	Ci. cu., Cu. from WNW.	7
20.	4.	750.00	29.821	34.5	31.5	.166	(D. 22.)	73.	W.	...	...	Ci.-cu., Cu. from WNW.	6
21.	4.5	758.50	29.838	34.4	29.7	.137	(A. 34.3)	70.5	W. by N.	Ci.-cu., Cu. from WNW.	7
Means.	29.833	34.2143	...	71.8

June 22, 83.]

METEOROLOGICAL TERM DAY.

[1840.

[97]

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A. m.	Göttingen time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauss's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6 25	...	21.8	758.65	29.760	64.2	62.7	.555	...	87.	SW. by S.	...	...	Cl., Cu.	6
7 25	...	22.1	758.85	29.767	68.3	66.	.613	9h.: (D. 60.)	85.	SSW.	...	...	Cl., Cu. from SW.	7
8 25	...	22.6	758.85	29.765	71.2	68.4	.659	(A. —.)	85.	SW.	...	...	S., Cu., Cu. from WSW.	7
9 25	...	23.2	759.00	29.767	72.6	68.6	.651	(A. —.)	82.5	SW. by S.	...	...	S., Cl. from WSW.	5
10 25	...	24.4	759.35	29.775	72.7	70.7	.723	...	81.5	SW.	...	...	Cl.-s.	8
11 25	...	26.	759.45	29.772	76.2	71.7	.718	...	76.5	WSW.	...	...	Cl., Cl. s. from W.	6
Means.	29.768	70.9	...	.653	...	82.9	...	...	...	...	...
12 25	...	26.7	759.50	29.770	80.2	71.5	.664	...	73.5	WSW.	...	...	Cl., Cu. from W.	6
13 25	...	27.7	759.45	29.763	81.6	72.3	.681	15h.: (D. 61.5)	71.2	W. by N.	...	...	Cl.-cu., Cu. from W.	7
14 25	...	28.6	759.40	29.767	83.	71.2	.638	(A. —.)	69.	WNW.	...	...	Cl.-cu., Cu. from W.	6
15 25	...	29.	759.65	29.765	83.7	71.1	.614	...	67.5	WNW.	...	...	Cl., Cl.-s., Cu.	6
16 25	...	29.	759.95	29.777	83.	71.6	.638	...	67.5	W. by N.	...	...	Cl.-s., Cu.	7
17 25	...	28.9	760.30	29.791	82.	72.6	.687	...	70.5	W.	...	...	Cl.-s., Cu.	7
Means.	29.770	82.2	...	.650	...	69.9	...	...	...	...	...
18 25	...	28.5	760.70	29.966	81.6	72.8	.696	...	71.5	W.	...	...	Cl.-cu.	7
19 25	...	27.6	761.35	29.839	79.5	72.7	.718	21h.: (D. 63.)	72.	W.	...	...	Cl.-s., Cu., Cl.	8
20 25	...	27.	761.85	29.861	77.7	71.	.560	(A. —.)	72.5	NW.	...	...	Cu., Cl.-cu.	4
21 25	...	25.5	762.15	29.879	74.5	66.9	.573	...	74.5	N. by E.	...	...	Clear.	...
22 25	...	25.5	762.75	29.903	72.6	68.1	.597	...	76.	NNE.	...	...	Cl.-s.	2
23 25	...	25.	762.85	29.910	71.9	65.7	.563	...	78.	NNE.	...	...	...	...
Means.	29.893	76.3	...	.613	...	74.1	...	...	...	...	...
0 25	...	24.5	763.00	29.918	70.3	64.5	.640	...	79.6	NNE.	...	...	N.	5
1 25	...	24.8	763.40	29.933	67.5	63.	.598	3h.: (D. 57.8)	81.8	NNE.	...	...	Misty, some Cu.	...
2 25	...	24.8	763.70	29.941	67.3	62.1	.500	(A. —.)	81.	NNE.	...	...	Cl., Cu.	3
3 25	...	24.7	763.90	29.957	67.	61.7	.495	...	81.5	NNE.	...	...	Cl., Cu. and S.	2
4 25	...	24.1	764.55	29.981	65.9	61.1	.487	...	81.5	NNE.	...	...	Cl., Cu., Cu.-s.	7
5 25	...	23.8	764.75	29.990	65.4	60.7	.483	...	82.3	NNE.	...	...	Cu., Cl.	6
Means.	29.954	67.2	...	.505	...	81.3	...	...	...	...	...

July 21, 22.]

METEOROLOGICAL TERM DAY.

[1840.

Göttingen time. A. M.	Barometer.			Therm'm, Foh.		Force of vapor, ins.	Dew point, F. ab.	Hygr., Gaussure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
	Temperature. centigrade.	Obs'd height. millimetres.	Corr. height. inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6 25	20.7	765.00	30.016	62.4	56.1	.388	...	76.2	NW by W.	...	...	Clear.	...
7 25	21.4	765.35	30.026	66.1	59.1	.430	9A.	75.3	NW by W.	...	...	Clear.	...
8 25	21.7	765.50	30.030	69.6	59.4	.399	(D. 59.)	71.	WNW.	...	...	Clear.	...
9 25	23.	765.60	30.028	72.3	61.5	.429	(A. —.)	69.	WNW.	...	...	Clear.	...
10 25	23.5	765.95	30.039	73.5	62.	.430	...	68.5	WNW.	...	...	Clear.	...
11 25	24.5	765.75	30.037	75.2	63.3	.451	...	68.	WSW.	...	...	A few light Cu. in W, hazy.	...
Means.	...	...	30.037	69.8	...	.431	...	71.7	...	...	...	...	...
12 25	25.	765.50	30.014	77.4	64.4	.459	...	66.5	WSW.	...	...	A few Cu. floating.	...
13 25	25.6	765.50	30.011	78.5	61.5	.450	15A.	65.	WSW.	...	...	Cu., Ci-ca. from NNW.	...
14 25	26.5	765.45	30.005	79.	64.8	.454	(D. 59.)	64.5	W.	...	...	Cu., Ci-ca. from N.	...
15 25	27.	765.15	29.990	80.4	64.4	.436	(A. —.)	63.5	W.	...	...	Cu., Ci-ca. from NW.	3
16 25	27.5	765.10	29.986	80.8	66.4	.485	...	64.5	WSW.	...	...	Cu., Ci-ca. from NW.	2
17 25	28.	765.00	29.980	78.5	67.	.530	...	67.	WSW.	...	...	Hazy, no clouds.	...
Means.	...	...	29.989	79.1	...	.467	...	65.2	...	...	...	...	...
18 25	26.6	765.15	29.993	75.6	65.6	.518	...	70.5	SW by S.	...	...	Hazy, no clouds.	...
19 25	26.2	765.25	30.003	71.9	65.	.540	2 1/2.	77.5	SW.	...	...	Very hazy.	...
20 25	23.7	765.30	30.012	69.5	64.5	.551	(D. 59.)	82.2	SW.	...	...	Very hazy.	...
21 25	22.1	765.30	30.020	67.5	64.	.558	(A. —.)	82.1	SW.	...	...	Clear.	...
22 25	21.	765.40	30.030	65.8	63.	.547	...	87.	SW.	...	...	Clear.	...
23 25	20.6	765.45	30.033	64.5	62.5	.546	...	89.5	SW.	...	...	Clear.	...
Means.	...	...	30.015	69.1	...	.543	...	81.6	...	...	...	...	...
0 25	19.5	765.50	30.041	62.2	61.1	.531	...	91.6	SW.	...	...	Clear.	...
1 25	21.7	765.70	30.039	64.	62.	.537	3A.	90.7	NNW.	...	...	Clear.	...
2 25	22.2	765.80	30.039	62.	60.3	.509	(D. 51.5)	90.1	NNW.	...	...	Clear.	...
3 25	22.	765.90	30.045	61.1	59.4	.494	(A. —.)	90.7	NNW.	...	...	Clear.	...
4 25	21.9	766.05	30.051	60.6	59.4	.500	...	91.3	NNW.	...	...	Clear.	...
5 25	21.7	766.25	30.064	60.7	60.	.515	...	92.2	NNW.	...	...	Clear.	...
Means.	...	...	30.046	61.8	...	.514	...	90.9	...	...	...	...	...

August 21, 22.]

METEOROLOGICAL TERM DAY.

[1840.

h. m.	Göttingen time.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, eith.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6 25	23.2	764.00	29.964	68.9	67.6	.668	.....	91.7	SSW.	..	..	Cl., Ci-s.	1
7 25	9h.:	.....	SSW.	..	..	.....	..
8 25	24.7	764.10	29.961	74.3	71.1	.718	(D. 66.5)	88.5	S.	..	..	Ci., Ci-s, Cu.	4
9 25	25.6	764.20	29.960	76.8	73.1	.762	.....	88.3	SW.	..	..	Cu., Ci.	5
10 25	26.5	764.50	29.968	78.7	74.2	.782	.....	88.3	SW.	..	..	Cu., N.	6
11 25	27.5	764.50	29.963	80.7	74.6	.776	.....	84.7	SW.	..	..	Cu., N.	6
Means.	29.963	75.9	.....	.739	.....	88.3	.....	..	..	.....	..
12 25	28.6	764.35	29.953	82.	74.	.738	.....	82.	SSW.	..	..	N., Cu.	5
13 25	29.	763.80	29.928	83.4	74.7	.750	15h.:	79.5	SSW.	..	..	N., Cu.	5
14 25	29.5	763.70	29.922	83.7	75.4	.774	(D. 69.5)	79.1	SW.	..	..	N., Cu.	6
15 25	29.5	763.50	29.914	83.5	75.5	.780	.....	80.3	SW.	..	..	N., Cu., Ci-s.	6
16 25	30.5	763.40	29.904	86.	76.8	.804	.....	79.	SSW.	..	..	Cu., Ci-cu.	5
17 25	30.	763.35	29.905	84.5	76.2	.796	.....	79.5	SW.	..	..	Cu., N.	1
Means.	29.921	83.8	.....	.774	.....	79.9	.....	..	..	.....	..
18 25	27.7	763.10	29.906	77.8	73.4	.763	.....	87.1	SW.	..	..	Ci-cu., Ci-s.	1
19 25	26.2	763.15	29.916	74.9	72.4	.759	21h.:	90.9	SW.	..	..	A few thin Cu. and Ci-cu.	1
20 25	27.8	763.50	29.922	73.8	70.6	.706	(D. 64.)	91.	S.	..	..	Clear.	..
21 25	S.	..	..	.....	..
22 25	27.	763.60	29.930	71.3	69.	.679	.....	90.2	S.	..	..	Clear.	..
23 25	26.3	763.75	29.939	70.6	69.2	.693	.....	92.7	S.	..	..	Clear.	..
Means.	29.923	73.7	.....	.720	.....	90.4	.....	..	..	.....	..
0 25	26.1	763.50	29.930	71.2	69.6	.700	.....	91.8	S.	..	..	Clear.	..
1 25	25.9	763.40	29.927	74.3	71.	.715	3h.:	87.4	S.	..	..	Clear.	..
2 25	24.5	762.95	29.917	70.6	69.	.686	(D. 66.)	92.3	S.	..	..	Clear.	..
3 25	23.5	762.85	29.917	70.6	69.2	.693	.....	93.5	S.	..	..	Clear.	..
4 25	22.9	763.00	29.926	69.9	68.5	.676	.....	94.1	S.	..	..	Ci., Cu.	4
5 25	23.4	763.65	29.949	70.9	69.4	.697	.....	92.8	S.	..	..	Lightly overcast.	8
Means.	29.928	71.2	.....	.694	.....	92.	.....	..	..	.....	..

h. m.	Göttingen time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hyg., Gauseme's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, eigh.
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
6 25	15.5	757.25	29.735	49.4	44.8	.261	.....	82.7	NW.	..	..	Clear.....	..
7 25	15.7	758.10	29.768	50.1	45.1	.260	94.:	78.4	NW.	..	..	Clear.....	..
8 25	15.2	759.00	29.805	50.7	43.7	.233	(D. 34.)	76.	NW.	2	..	A few Cu. near Hor.....	..
9 25	15.3	759.50	29.825	52.5	44.8	.226	.....	73.5	NW.	2	..	A few Cu. and Ci-cu. from WNW.....	..
10 25	15.6	759.65	29.829	53.5	45.	.219	.....	72.5	NW.	3	..	Cu. in Hor.....	1
11 25	15.5	759.80	29.835	54.2	45.6	.225	.....	71.	NW.	3	..	Cu. Ci-cu. from NW.....	2
Means	29.799	51.7	.....	.236	.....	75.5	.....	..	..	.....	..
12 25	15.8	760.00	29.842	55.	46.5	.236	.....	71.	NW.	2	..	Cu. Ci-cu. from NW.....	2
13 25	15.3	760.15	29.851	57.	47.5	.237	154.:	69.6	NW.	1	..	Cu. Ci-cu., Ci-s.....	3
14 25	16.2	760.55	29.863	57.2	47.7	.239	(D. 29.7)	68.5	NW.	2	..	Cu. Ci-cu., Cu-s. from NW.....	3
15 25	15.2	760.75	29.875	56.6	46.6	.220	.....	68.5	NW.	2	..	Cu. Ci-cu., Cu-s. from NW.....	3
16 25	18.9	761.85	29.900	56.4	46.	.209	.....	67.6	NW.	2	..	Cu. Ci-cu., Cu-s. from NW.....	1
17 25	18.5	762.75	29.937	54.8	46.5	.238	.....	67.	NW. by N.	..	..	Clear.....	..
Means	29.878	56.2	.....	.230	.....	68.7	.....	..	..	.....	..
18 25	18.1	763.10	29.953	48.6	43.1	.232	.....	76.1	NW.	..	..	Thin Ci-s in Hor.....	..
19 25	17.3	764.50	30.012	46.4	41.9	.232	214.:	78.	NW.	..	..	Cu. in NW, aurora.....	..
20 25	16.4	765.00	30.036	45.5	40.7	.217	(D. 28.5)	78.3	N.	..	..	Cu in N, aurora.....	..
21 25	15.2	766.00	30.081	42.3	39.1	.220	.....	78.5	N.	..	..	Clear.....	..
22 25	15.2	766.20	30.091	40.3	37.1	.203	.....	78.5	N.	..	..	Clear.....	..
23 25	14.9	766.70	30.110	37.	35.	.200	.....	84.5	N.	..	..	Clear.....	..
Means	30.047	43.3	.....	.217	.....	78.8	.....	..	..	.....	..
0 25	13.9	766.85	30.122	37.6	37.2	.213	.....	85.9	N.	..	..	Clear.....	..
1 25	13.6	767.30	30.140	37.5	36.5	.223	34.:	98.3	N.	..	..	Clear.....	..

A. m.	Göttingen time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Baumers's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6 35.....		19.1	761.70	29.893	55.	54.7	.435	94.1	93.1	NE.	..	..	N.....	8
7 25.....		18.5	761.45	29.886	55.	54.5	.429	94.1	93.5	NE. by E.	..	..	N.....	8
8 25.....		18.5	760.95	29.867	56.	55.3	.439	(D. 55.)	91.	E. by N.	.01	.01	N., raining.	8
9 25.....		18.3	761.00	29.869	56.6	55.8	.446	(A. —.)	90.	E. by N.	..	..	N.....	8
10 25.....		18.	760.30	29.844	56.	55.4	.441	..	91.	ENE.	..	..	N., raining.	8
11 25.....		17.9	759.25	29.803	56.5	55.9	.449	..	91.	NE. by E.	..	..	N., raining.	8
Means.....		29.860	55.8	....	.440	..	91.6	.....	..	..	.....	..
12 25.....		17.9	758.30	29.766	57.	56.6	.463	..	92.	NE.	..	..	Very fine mist	8
13 25.....		17.9	757.35	29.729	57.5	57.	.467	16h.	91.	NE.	..	..	Thick fog	8
14 25.....		18.	756.50	29.694	58.5	57.8	.478	(D. 57.)	91.5	NE.	..	..	Fine rain.	8
15 25.....		17.9	756.05	29.677	58.5	58.1	.487	(A. —.)	91.5	NE.	.01	.01	Fine rain.	8
16 25.....		18.	755.55	29.657	58.5	58.2	.490	..	91.4	NE.	.02	.02	N., raining.	8
17 25.....		18.2	755.15	29.641	58.	57.5	.475	..	93.	NE.	..	..	N., raining.	8
Means.....		29.694	58.	..	.477	..	91.7	.....	..	..	.....	..
18 25.....		18.4	754.60	29.620	58.	57.8	.484	..	94.	NE.	..	.01	N.....	8
19 25.....		18.5	754.15	29.601	58.	57.7	.483	..	93.3	NE.	..	..	N., raining.	8
20 25.....		18.5	754.20	29.603	57.5	57.	.467	..	94.	NW. by N.	.03	.03	N., raining.	8
21 25.....		18.5	753.85	29.589	57.7	57.2	.471	..	93.2	NW. by N.	..	..	N., raining.	8
22 25.....		18.7	753.00	29.555	57.2	57.	.471	..	94.1	NW. by N.	.11	.11	N., raining.	8
23 25.....		18.7	752.80	29.548	57.1	56.5	.468	..	93.	NW. by N.	.01	.01	N.....	8
Means.....		29.586	57.6	....	.472	..	93.6	.....	..	..	.....	..
0 25.....		18.7	752.85	29.550	56.4	56.	.454	..	92.9	NW.	..	..	N.....	8
1 25.....		18.5	753.05	29.557	56.2	55.5	.442	..	92.4	NW.	..	..	N.....	8
2 25.....		18.4	753.20	29.564	56.6	55.8	.446	..	92.2	NW.	..	..	N.....	8
3 25.....		18.3	753.00	29.556	57.5	55.7	.439	..	89.9	NW. by W.	..	..	N.....	8
4 25.....		18.	753.90	29.593	57.	58.	.370	..	83.9	NNW.	4	..	N.....	8
5 25.....		17.	755.75	29.672	58.7	49.	.308	..	79.8	NNW.	3	..	Cu., N.	8
Means.....		29.582	56.2	....	.409	..	86.5	.....	..	..	.....	..

November 21, 22.]

METEOROLOGICAL TERM DAY.

[1846.

A. m.	Göttingen time.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saunre's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, eigh.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6 25	...	4.3	766.15	30.140	23.5	23.5	.147	...	95.9	N. by E.	...	...	Cl., Ci-cu.	7
7 25	...	4.8	766.75	30.166	25.8	25.5	.155	9h.	93.5	N. by E.	...	...	Ci-cu., Ci-s., Cu-s.	8
8 25	...	4.8	767.10	30.175	29.2	28.4	.167	(D. 25.)	92.	N. by E.	...	...	Ci-cu., S.	8
9 25	...	4.8	768.90	30.172	33.	31.	.172	(A. 30.6)	86.	N. by E.	...	...	Ci-cu., N., Cu-s., S.	8
10 25	...	4.5	767.00	30.172	36.1	31.8	.154	...	80.	N. by E.	...	...	Ci-cu., N., and hazy.	8
11 25	...	4.8	766.60	30.156	36.4	33.	.145	...	74.	N. by E.	...	...	Ci-cu., Cu-s.	7
Means	30.163	31.	...	.157	...	86.7	...	...	...	...	...
12 25	...	5.3	766.00	30.129	38.6	34.2	.165	...	76.	W.	...	...	Ci-cu., N., Cu-s.	8
13 25	...	6.	765.50	30.105	40.3	35.7	.175	15h.	74.5	W. by S.	...	...	Ci-cu., Ci-s., Cu-s. from WNW	6
14 25	...	6.8	765.60	30.102	39.8	35.3	.173	(D. 23.)	74.5	SW.	...	...	Ci-cu., Ci-s., Cu-s. from WNW	6
15 25	...	6.6	765.40	30.098	38.5	34.7	.176	(A. 39.)	76.	SW.	...	...	Ci-cu., Ci-s., Cu-s. from WNW	5
16 25	...	6.8	765.20	30.090	37.5	33.2	.159	...	75.5	SW.	...	...	Ci., Ci-cu., Cu-s.	4
17 25	...	7.5	765.45	30.097	36.5	33.5	.157	...	79.1	E. by N.	...	...	Ci., Ci-cu., Ci-s.	1
Means	30.103	38.5	...	.167	...	75.9	...	...	...	...	...
18 25	...	7.3	766.00	30.120	36.	32.7	.167	...	80.4	E. by N.	...	...	Overcast, dark	8
19 25	...	6.7	765.65	30.108	33.7	31.3	.169	21h.	83.4	E. by N.	...	...	Ci-cu., Cu-s.	2
20 25	...	7.5	766.15	30.125	33.6	31.8	.180	(D. 27.3)	84.5	E. by N.	...	...	Ci-cu.	1
21 25	...	7.3	765.05	30.082	32.5	31.5	.186	(A. 32.6)	88.4	E. by N.	...	...	Cu-s.	1
22 25	...	7.	764.55	30.065	31.5	30.5	.179	...	91.4	E.	...	...	Cu-s.	1
23 25	...	6.1	764.30	30.056	32.6	31.	.176	...	88.9	E.	...	...	N.	1
Means	30.093	33.3	...	.176	...	86.2	...	...	...	...	...
0 25	...	5.8	768.65	30.034	30.	29.	.169	...	92.7	E.	...	...	Lightly overcast.	8
1 25	...	6.	763.40	30.022	31.	30.	.176	3h.	92.	E.	...	...	Cl., Ci-s., N.	8
2 25	...	5.5	762.95	30.008	31.4	30.2	.175	(D. 28.4)	94.	E.	...	...	Ci., Ci-s., N.	8
3 25	...	5.1	762.50	29.992	31.7	30.3	.174	(A. 31.5)	92.8	ENE.	...	...	Ci., Ci-s., N.	8
4 25	...	5.2	762.20	29.979	32.6	31.3	.181	...	93.2	ENE.	...	...	Cl., Ci-s., N.	8
5 25	...	4.9	762.00	29.972	33.1	32.	.188	...	95.9	ENE.	...	...	Ci., Ci-cu., Ci-s., N.	8
Means	30.001	31.6	...	.177	...	93.4	...	...	...	...	...

December 21, 22.]

METEOROLOGICAL TERM DAY.

[1840.]

h. m.	Göttingen time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauesure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, eiths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6 25.	...	-2.2	764.90	30.122	20.6	20.	.123	...	81.1	W.	..	..	Clear.	..
7 25.	9h.	...	W.	..	..	...	..
8 25.	...	-2.	765.70	30.152	23.2	20.8	.109	...	78.5	W.	..	..	Clear.	..
9 25.	...	-1.5	766.00	30.162	25.	22.6	.118	(D. 17.)	76.5	W. by N.	..	..	Clear.	..
10 25.	...	-0.6	766.15	30.163	27.	24.	.119	(A. 25.8)	74.5	W.	..	..	Very little Cl., Ci s. in W.	..
11 25.	...	0.0	765.80	30.147	28.	24.9	.123	...	72.5	W.	2	..	Ci., Cu.	1
Means.	30.149	24.8	...	.118	...	76.6	...	..	..	...	..
12 25.	...	0.6	765.20	30.120	29.	26.	.131	...	70.5	W. by N.	1	..	Ci., Ci-cu., Cu. from N.	2
13 25.	...	0.7	765.25	30.121	29.5	26.5	.134	...	70.	W. by N.	2	..	Ci., Ci cu., Cu. from N.	3
14 25.	...	1.2	765.40	30.125	29.5	26.5	.134	15h.	70.	W. by N.	1	..	Ci-cu., Cu.	1
15 25.	...	1.5	765.50	30.128	29.4	25.2	.113	(D. 19.8)	70.	W. by N.	1	..	Ci., Ci cu.	..
16 25.	...	1.3	765.40	30.124	28.2	24.7	.117	(A. 29.5)	71.	W. by N.	..	..	Ci., Cu-s.	1
17 25.	...	1.3	765.60	30.132	27.	24.5	.127	...	72.5	WSW.	..	..	Ci., Cu-s.	2
Means.	30.125	28.8	...	.126	...	70.7	...	..	..	...	..
18 25.	...	1.3	765.70	30.136	26.2	23.4	.118	...	74.	WSW.	..	..	Ci-cu., Cu-s.	1
19 25.	...	1.	766.00	30.149	25.	23.	.124	...	77.5	W.	..	..	Very little Cu-s. in N.	..
20 25.	...	0.7	765.80	30.143	25.3	23.2	.124	21h.	78.8	W.	..	..	N.	6
21 25.	...	0.5	765.55	30.134	25.7	24.	.132	(D. 23.9)	81.	...	..	..	Overcast.	8
22 25.	...	0.8	764.65	30.097	25.3	24.2	.140	(A. 26.)	86.5	SW.	..	..	Light clouds in Hor.	2
23 25.	...	0.4	764.25	30.083	25.8	24.5	.139	...	86.5	SW.	..	..	Clear.	..
Means.	30.124	25.5	...	.129	...	80.7	...	..	..	...	..
0 25.	...	0.3	763.25	30.045	26.2	24.6	.140	...	85.	SW.	..	..	Clear.	..
1 25.	...	0.2	762.90	30.032	25.7	25.	.148	...	86.5	SW.	..	..	Overcast.	8
2 25.	...	0.2	762.30	30.004	27.	25.6	.144	3h.	87.2	SSW.	..	..	Overcast.	8
3 25.	...	0.2	761.35	29.971	27.5	26.	.146	(D. 26.2)	85.1	S.	..	..	Overcast.	8
4 25.	...	0.2	759.90	29.914	27.5	25.5	.138	(A. 27.)	84.	S.	..	..	Overcast.	8
5 25.	...	0.0	758.45	29.858	28.5	26.1	.137	...	81.9	S.	1	..	Overcast.	8
Means.	29.971	27.1	...	.142	...	84.9	...	..	..	...	..

MAGNETIC OBSERVATORY

AT THE

GIRARD COLLEGE, PHILADELPHIA.

ORDINARY MAGNETIC AND TRIPLE OBSERVATIONS,

FROM JANUARY TO JUNE, 1841.

GENERAL NOTES FOR THE HALF YEAR ENDING JUNE, 1841.

In January of this year a reflecting vertical force magnetometer was introduced, in place of the Lloyd balance magnetometer. This required a new arrangement of the instruments. The horizontal force magnetometer was left in its place, and the position of the declination and vertical force instruments altered to suit the relative intensities of the three magnetic bars, which were determined anew, the three instruments being placed as before by Professor Lloyd's problem. The declinometer readings came upon a different part of the scale; but it was ascertained, by careful experiments, that the instrument was in equilibrium.

The instruments, then, during this year were, the Gauss declinometer by Meyerstein, a reflecting vertical force magnetometer devised by me, and made by Saxton, a Gauss horizontal force magnetometer.

Thermometers by Francis, of Philadelphia, with verniers reading to tenths of a degree, were placed in the boxes of the horizontal and vertical force instruments.

The unit of the scale of the declinometer was $27''.3$. The unit of scale of the vertical force magnetometer was .000,033, and of the horizontal force instrument .000,140, in parts of the total vertical and horizontal force, respectively.

The correction for temperature for the horizontal force instrument at the beginning of this year was 3.0, and at the end, 2.7 divisions of the scale for one degree of Fahrenheit. The correction for the vertical force was 13.5 divisions of its scale for one degree.

The bar of the vertical force instrument lost its magnetism rapidly when first put up, and on the 24th of May the balance of the instrument, but not the sensibility, was altered. The approximate correction to reduce the bar to the old position is +520 divisions.

The time is reckoned as before; each observation entered is the mean of three readings of the scale.

The observations during the first part of the month of January are omitted, on account of the changes of position and kind of instruments noted above.

On the 2d of June the wires of the horizontal force magnetometer were struck accidentally, so as to disarrange the instrument; and as the readings were near the end of a subsidiary scale, which had been attached to the original one, it was thought best to rearrange the instrument, so as to bring it nearly to the middle division of the scale (500) when the other instruments were not in the observatory. The approximate correction to reduce the position of June 1st to that from June 1st to June 5th, is -213, and from that position to the new, -687. The whole difference of reading between the old and new positions is 900 divisions of the scale, nearly. The unit of the scale was found to correspond to .000,038 of the whole force, so that .000,040 has been assumed for the whole year, the determination in May, 1840, having been .000,042.

Göttingen time. Observatory time	<i>h. m.</i> 6 00 0 19½	<i>h. m.</i> 8 00 2 19½	<i>h. m.</i> 10 00 4 19½	<i>h. m.</i> 12 00 6 19½	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 16 00 10 19½	<i>h. m.</i> 18 00 12 19½	<i>h. m.</i> 20 00 14 19½	<i>h. m.</i> 22 00 16 19½	<i>h. m.</i> 0 00 18 19½	<i>h. m.</i> 2 00 20 19½	<i>h. m.</i> 4 00 22 19½	Means.	* Reduced means.
Jan. 12.	568.9	563.7	570.5	570.6	576.6	575.6	562.4	559.7	565.3	570.1	571.3	569.5	568.7	455.9
13.	569.3	568.5	575.9	567.4	550.6	573.	565.3	561.	565.5	569.3	575.2	572.8	567.8	458.
14.	570.7	569.6	567.7	560.4	573.7	571.	562.3	564.6	569.9	566.2	564.4	579.7	566.8	454.
15.	578.3	569.3	565.3	562.5	578.6	569.9	563.4	568.9	567.1	566.	573.	566.1	569.	456.3
16.	572.3	578.1	571.5	557.2	574.5	576.	568.1	564.9	566.8	560.5	561.	560.6	572.7	459.9
17.	579.3	577.8	578.6	578.9	580.7	584.7	573.7	574.5	576.8	569.	579.	579.3	578.6	468.8
18.	579.9	583.6	584.7	583.5	579.5	586.	567.1	572.	574.8	583.	562.6	563.1	580.8	465.8
19.	581.8	581.3	580.9	578.6	585.3	580.6	573.8	570.8	570.3	577.	567.6	564.8	579.4	466.6
20.	578.4	580.4	580.1	580.2	583.3	584.8	576.	566.8	571.7	574.1	560.5	562.3	579.	468.9
21.	581.8	581.3	581.1	581.8	585.1	585.1	575.7	571.5	576.5	581.	565.3	560.3	560.5	467.7
22.	580.4	580.3	581.1	581.9	583.	583.6	576.7	572.8	578.9	580.1	580.2	580.9	579.8	467.
23.	578.9	594.9	585.3	578.1	583.9	582.5	570.1	570.4	579.	574.6	577.7	610.1	581.6	466.8
24.	592.7	574.6	577.	580.	576.3	583.5	572.4	566.3	565.3	573.4	561.3	581.9	577.	464.9
25.	581.8	577.5	582.	570.5	584.	583.1	573.7	569.	570.9	569.	581.	579.3	576.8	464.
26.	576.1	577.7	578.3	570.	583.4	583.1	572.3	569.2	579.	576.2	576.6	577.1	575.5	463.7
27.	576.3	576.3	569.2	578.1	581.4	582.	569.1	566.	567.3	573.3	576.2	576.6	574.1	461.3
28.	577.	574.5	576.6	573.5	582.1	581.7	567.4	565.6	569.4	563.	576.9	577.4	574.1	461.3
Means	577.6	576.7	576.5	573.3	579.	580.	570.	566.2	569.4	574.2	579.5	581.3	575.4	
* Reduced means	465.	463.9	463.7	460.4	466.2	467.2	457.2	453.4	456.6	461.4	466.7	468.5		462.6

See general notes

* Reduced to the position of December, 1840; correction, -112.8.

JANUARY.]

HORIZONTAL FORCE MAGNETOMETER.

[1841.]

[97]

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Göttingen time. Observatory time	h. m. 6 02½ 0 23	h. m. 8 02½ 2 23	h. m. 10 02½ 4 23	h. m. 12 02½ 6 23	h. m. 14 02½ 8 23	h. m. 16 02½ 10 23	h. m. 18 02½ 12 23	h. m. 20 02½ 14 23	h. m. 22 02½ 16 23	h. m. 0 02½ 19 23	h. m. 2 02½ 20 23	h. m. 4 02½ 22 23	Means.	Reduced to 32° F.
Jan. 12.....	959.	945.7	945.8	936.1	936.3	976.	993.1	960.2	922.1	923.	930.5	939.9	947.3	913.
13.....	919.3	879.8	927.9	930.8	932.5	947.8	970.1	962.1	931.7	938.	956.	936.	936.2	914.6
14.....	928.9	949.8	959.9	934.7	913.2	964.6	986.1	969.5	946.	960.	977.8	972.6	955.2	941.4
15.....	945.8	943.5	920.9	914.3	920.5	948.3	992.9	971.6	980.9	976.9	968.5	968.	954.3	941.1
16.....	984.6	964.2	942.	940.5	926.8	955.8	961.3	949.3	984.4	927.9	929.5	932.7	945.7	938.6
18.....	945.8	936.8	928.5	915.5	913.8	932.9	936.4	917.6	884.7	886.7	877.7	876.2	912.2	911.6
19.....	874.5	861.7	882.4	848.4	822.7	859.7	921.9	893.3	889.3	888.7	930.2	938.	890.4	924.
20.....	922.2	927.1	908.	904.	899.	921.1	958.5	976.3	962.2	938.9	946.9	942.	932.9	961.8
21.....	931.3	935.4	933.9	927.4	918.7	938.4	970.9	936.6	946.9	942.8	966.9	959.9	942.4	932.8
22.....	948.	.....	.....	.....	949.	951.6	974.3	958.8	936.7	940.9	938.5	938.8	946.	935.7
23.....	930.3	922.9	919.1	916.7	918.5	931.9	946.1	936.9	937.5	937.6	936.7	937.8	930.2	923.9
25.....	961.8	946.8	944.4	932.9	930.2	926.6	972.5	950.7	952.7	955.4	955.2	977.2	950.5	927.1
26.....	997.9	967.5	961.9	916.	927.6	945.3	999.9	1006.2	961.4	971.	978.7	941.4	964.6	941.8
27.....	971.6	963.5	975.4	954.5	951.2	961.	988.	978.1	999.8	1007.	922.1	1009.4	973.4	949.
28.....	970.5	960.7	958.5	952.4	936.3	963.3	988.2	985.1	968.9	976.	984.1	988.7	959.2	935.9
29.....	972.	958.5	957.5	953.2	940.2	969.5	1001.7	983.2	982.6	948.4	946.3	983.1	986.3	933.4
30.....	947.1	943.7	940.4	935.4	930.	960.9	981.9	971.9	980.1	955.	989.4	940.	948.	926.6
Means.....	947.7	937.9	936.5	925.8	921.6	944.3	973.2	959.2	941.5	950.3	946.1	949.	944.6	
Reduced to 32° F.	932.7	924.7	925.8	915.9	912.	933.5	959.4	942.7	925.3	934.4	931.1	935.5		931.1

See general notes.

* Nine minutes late.

† Four minutes late.

JANUARY.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

[1861.]

	h. m. 6 02½ 0 23	h. m. 8 02½ 2 23	h. m. 10 02½ 4 23	h. m. 12 02½ 6 23	h. m. 14 02½ 8 23	h. m. 16 02½ 10 23	h. m. 18 02½ 12 23	h. m. 20 02½ 14 23	h. m. 22 02½ 16 23	h. m. 0 02½ 18 23	h. m. 2 02½ 20 23	h. m. 4 02½ 22 23	Means.
Gottingen time	44.	43.2	43.	42.2	42.	42.3	44.	45.	44.8	44.5	43.4	42.4	43.4
Observatory time	41.	40.2	39.8	39.3	38.3	38.8	39.	39.	39.	39.	38.5	38.	39.2
Jan. 12	37.7	37.3	36.9	36.3	36.3	36.6	37.2	37.2	36.9	36.5	35.6	35.	36.6
13	35.	34.8	34.8	34.8	35.	35.8	37.	37.8	38.	38.	37.8	37.6	36.4
14	37.5	37.2	37.1	36.9	37.	37.	38.	38.4	38.5	38.4	38.	37.7	37.7
15	42.8	40.5	39.	35.3	33.	31.5	30.5	30.3	29.	27.	25.	23.5	32.3
16	22.3	21.2	20.	18.9	18.2	18.7	20.3	22.	22.	22.	22.	22.	20.8
17	22.4	22.8	22.8	23.	23.3	24.6	26.	27.2	28.	29.2	29.7	30.8	25.8
18	31.9	32.5	33.	33.7	34.3	35.5	36.2	37.	37.	37.	37.	37.	35.2
19	36.8	...	...	...	36.	36.	36.5	37.	36.7	36.	35.2	34.6	36.1
20	33.	33.5	33.	32.8	32.6	33.3	34.3	35.3	36.3	36.4	35.8	36.	34.3
21	34.	33.6	37.9	37.	37.	38.2	40.6	42.	43.1	42.7	41.3	40.5	39.8
22	39.3	38.5	37.7	36.3	36.3	37.5	39.7	41.5	42.5	42.5	42.	41.	39.6
23	40.4	40.	39.6	39.	39.1	40.	40.5	41.	42.	43.	42.8	42.2	40.8
24	41.9	41.	40.4	40.1	40.5	41.5	43.4	46.	46.6	46.4	45.4	44.	43.1
25	43.	43.	41.	40.2	40.	39.5	39.6	40.	39.7	39.8	39.8	39.5	40.3
26	39.4	39.2	39.2	39.	39.	39.1	40.	40.2	...	...	39.7	39.	39.8
Means	37.	36.4	35.9	35.3	35.2	35.6	36.6	37.5	37.4	37.3	37.	36.5	36.5

Degrees Fahrenheit.

JANUARY.]

TRIPLE OBSERVATIONS.

[1841.]

[97]

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	Declination.			Vertical force.			Horizontal force.			Tempera- ture Fah- renheit.
	<i>h.</i> <i>m.</i>	<i>h.</i> <i>m.</i>	<i>h.</i> <i>m.</i>	<i>h.</i> <i>m.</i>	<i>h.</i> <i>m.</i>	<i>h.</i> <i>m.</i>	<i>h.</i> <i>m.</i>	<i>h.</i> <i>m.</i>	<i>h.</i> <i>m.</i>	
Göttingen time.....	13 52½	14 00	14 07½	13 50	13 57½	14 05	13 55	14 02½	14 10	
Observatory time....	8 12	8 19½	8 27	8 09½	8 17	8 24½	8 14½	8 22	8 29½	
Jan. 13.....	576.2	576.6	577.3	.....	.....	.....	936.3	936.3	937.	42.
13.....	547.1	550.6	553.7	.....	.....	.....	953.8	932.5	923.6	39.
14.....	573.7	573.6	574.	.....	.....	.....	912.8	913.2	912.9	36.3
15.*.....	578.1	578.8	579.2	.....	.....	.....	915.6	920.5	921.4	35.
16.....	574.1	574.5	576.1	.....	.....	.....	929.	926.8	924.6	37.
18.....	580.	580.7	581.2	.....	.....	.....	913.6	913.8	911.8	33.
19.....	578.1	579.5	579.3	.....	.....	.....	827.3	822.7	821.4	18.2
20.....	583.4	585.3	584.2	.....	.....	.....	895.4	899.	901.7	23.3
21.....	.....	583.3	.....	.....	.....	.....	.....	918.7	.....	34.3
22.....	584.6	585.1	585.4	.....	.....	.....	948.	949.	951.4	35.
23.....	583.3	583.	583.8	.....	.....	.....	919.2	918.5	917.5	39.6
25.....	580.7	583.9	585.1	.....	.....	.....	926.9	930.2	934.1	37.
26.....	578.7	576.3	576.7	.....	.....	.....	925.5	927.6	924.1	36.3
27.....	578.4	584.	577.7	.....	.....	.....	954.	951.2	962.7	39.1
28.....	582.4	583.4	583.8	.....	.....	.....	937.9	936.3	936.3	40.5
29.....	580.9	581.4	582.	.....	.....	.....	940.3	940.2	940.8	40.
30.....	584.2	582.1	582.8	925.8	930.	931.5	39.

FEBRUARY.]

VERTICAL FORCE MAGNETOMETER.

[1841.]

[97]

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Göttingen time... Observatory time.	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 25 57½ 20 17	h. m. 27 57½ 22 17	Means.	Reduced to 32° F.
Feb. 1.....	491.2	493.9	496.4	494.7	478.5	482.1	482.2	479.9	480.	481.	483.6	487.	484.2	483.5
2.....	488.1	487.2	486.3	485.2	486.1	487.1	493.3	500.8	511.7	512.1	509.1	511.5	496.5	496.5
3.....	513.4	511.1	507.6	503.6	500.6	509.	530.	557.1	609.5	610.4	565.5	539.2	538.	488.
4.....	521.5	508.	498.4	474.	463.4	472.	491.1	509.1	531.2	526.3	505.	488.7	497.9	489.1
5.....	476.5	465.3	452.9	444.6	436.8	445.1	477.4	508.8	567.7	570.6	546.1	528.5	493.4	437.3
6.....	517.6	505.1	503.7	498.6	497.5	503.2	524.9	548.9	588.8	610.3	606.7	604.9	539.8	489.9
7.....	549.9	551.7	535.9	523.2	507.6	520.6	546.8	580.	649.3	640.3	605.3	589.1	566.6	489.4
8.....	572.5	559.2	573.9	561.6	549.1	540.2	534.5	533.6	531.7	537.8	543.6	544.9	548.5	481.
9.....	544.1	538.5	530.7	521.5	513.8	533.5	566.1	580.	608.3	588.2	543.8	510.3	548.2	479.4
10.....	477.4	451.	425.3	404.	389.1	396.6	415.	441.9	465.1	447.1	401.7	373.1	423.9	479.2
11.....	363.8	329.5	310.2	294.8	286.1	302.9	332.	353.5	398.5	377.1	349.4	333.	335.1	489.
12.....	317.7	307.	287.3	274.9	271.9	288.4	333.3	361.9	*488.9	445.0	397.3	375.5	344.6	490.4
13.....	413.2	393.4	376.1	359.1	363.	369.6	396.8	415.3	*451.6	443.3	425.6	401.	399.9	497.1
14.....	1397.9	384.9	392.	374.	365.4	393.1	428.3	462.3	552.6	536.1	511.6	507.2	442.1	494.7
15.....	510.8	513.4	507.	507.5	511.5	521.8	553.7	568.7	581.9	590.5	591.6	591.1	545.6	502.4
16.....	589.6	585.3	571.9	556.2	543.7	531.8	540.3	555.7	623.4	607.	590.	581.3	573.1	507.
17.....	572.3	564.9	557.9	551.6	547.3	550.	552.9	555.6	570.5	576.	576.	577.3	562.6	504.6
18.....	571.1	564.9	549.1	536.5	530.7	541.8	564.	591.3	713.7	696.7	651.5	633.6	595.4	502.3
19.....	680.1	670.8	661.6	651.7	639.9	640.8	658.4	695.3	737.9	740.	746.7	708.	687.6	515.2
20.....	691.6	677.5	671.1	647.7	641.1	654.6	676.	720.1	736.4	749.9	711.5	675.9	687.8	515.2
21.....	652.5	620.1	593.6	573.4	556.2	545.7	535.	535.2	542.9	567.4	543.4	533.7	565.8	515.9
22.....	506.4	493.8	472.	451.6	445.6	467.8	483.9	511.6	535.8	521.9	529.	538.1	495.	509.8
23.....	533.2	543.7	539.9	574.	564.	580.5	611.9	653.4	733.6	721.9	712.5	723.4	624.3	517.7
24.....	710.2	712.6	713.7	706.5	710.6	718.7	719.9	723.4	750.6	752.5	738.6	729.1	723.9	526.8
Means.....	527.1	516.	508.1	498.4	491.2	500.2	518.7	539.1	580.1	577.1	557.7	544.3	530.	
Reduced to 32° F.	486.6	489.7	489.2	486.3	483.1	474.6	468.6	468.9	455.9	496.1	492.1	490.3		481.67

* Sun on the instrument.

† Nine minutes late.

February.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

[1841.

Give time. Observatory time.	A. m. 5 57 1/2 0 17	A. m. 7 57 1/2 2 17	A. m. 9 57 1/2 4 17	A. m. 11 57 1/2 6 17	A. m. 13 57 1/2 8 17	A. m. 15 57 1/2 10 17	A. m. 17 57 1/2 12 17	A. m. 19 57 1/2 14 17	A. m. 21 57 1/2 16 17	A. m. 23 57 1/2 18 17	A. m. 25 57 1/2 20 17	A. m. 27 57 1/2 22 17	Mean.
Feb. 1.	36.9	36.7	36.3	36.2	36.2	36.4	36.6	36.7	36.5	36.5	37.	36.5	36.5
2.	36.9	36.9	36.8	36.8	36.2	36.4	37.3	36.8	36.5	36.4	36.3	36.3	37.4
3.	36.2	36.	37.8	37.3	37.5	38.4	37.4	38.4	39.	38.4	38.3	38.3	37.4
4.	36.	37.	36.9	35.	34.9	36.	37.4	39.3	41.4	38.	36.8	35.7	37.1
5.	35.	34.	33.3	32.9	32.7	34.	37.	39.3	46.	41.	38.5	36.9	36.9
6.	36.	37.6	37.	37.	37.	38.	40.	41.6	41.5	42.3	43.	41.5	39.4
7.	37.8	37.	38.1	35.2	34.8	36.6	39.	41.5	49.6	42.3	41.	39.5	39.2
8.	36.3	37.4	37.	36.5	36.2	36.2	36.3	37.	37.5	37.4	37.5	37.3	37.1
9.	37.	36.4	35.8	35.	35.	37.2	40.	40.2	43.	38.	35.3	33.1	37.1
10.	31.	29.1	27.	25.9	25.2	26.8	28.5	30.5	32.	28.2	26.	24.8	27.9
11.	21.7	19.8	18.3	17.	17.	19.	21.2	23.3	27.	22.2	20.8	20.	20.6
12.	18.8	17.5	16.5	15.8	16.2	18.3	21.	23.2	24.6	26.	23.6	23.5	21.2
13.	24.9	23.3	22.1	21.1	20.9	23.	25.5	27.	28.2	27.1	25.7	24.8	24.8
14.	24.	23.2	22.7	22.	22.5	25.5	28.	30.8	32.3	31.	28.3	26.1	26.1
15.	32.3	32.3	32.3	32.5	32.8	34.	36.6	37.3	38.3	38.3	38.2	35.2	35.2
16.	37.9	37.	35.9	35.	34.5	34.3	35.2	37.	41.7	39.	38.	36.9	36.9
17.	36.7	36.	35.7	35.	35.	35.4	35.8	36.3	37.5	37.4	37.5	36.3	36.3
18.	36.4	35.6	34.8	33.9	34.	35.3	37.6	40.	42.2	44.	43.	41.	38.9
19.	43.8	43.3	42.2	41.3	41.	42.	44.2	46.5	51.	49.	47.	45.	44.7
20.	44.8	43.3	43.	41.1	41.2	43.	46.2	48.7	53.2	47.8	45.	42.8	44.8
21.	40.8	38.9	37.1	35.9	35.	34.5	36.	34.5	36.	36.	34.	32.1	35.7
22.	31.2	30.	28.6	27.5	27.5	29.3	31.	31.	33.2	32.8	32.7	32.9	30.8
23.	33.4	32.6	33.9	34.	34.7	37.	40.6	44.	49.	46.2	46.4	46.	39.8
24.	45.8	45.7	45.6	45.7	45.9	48.4	46.8	47.	48.3	48.	47.	46.8	46.6
Mean.	35.	34.1	33.4	32.8	32.6	33.8	35.3	37.2	41.2	38.	36.6	36.	35.58

Degree Fahrenheit.

* Sun on the magnet and thermometer.

February.]

HORIZONTAL FORCE MAGNETOMETER.

[1841.

[97]

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Göttingen time. Observatory time.	h. m. 6 02½ 0 22	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	Means.	Reduced to 32° F.
Feb. 1.	1007.8	974.1	962.8	952.8	942.7	937.2	927.	918.2	908.6	898.3	887.6	877.	1070.7	1058.4
2.	930.2	930.9	929.	923.1	918.2	912.7	902.	892.7	882.6	872.3	861.6	851.2	1052.	1037.6
3.	933.7	931.3	925.9	919.3	914.5	904.	894.	884.5	874.1	863.6	853.1	842.6	1049.1	1036.4
4.	931.6	920.4	910.	902.	896.5	890.7	883.3	876.5	869.5	862.5	855.5	848.5	1040.2	1029.7
5.	917.5	910.8	914.	911.2	910.2	903.7	893.3	883.5	873.5	863.5	853.5	843.5	1036.7	1026.7
6.	932.7	921.	916.1	912.	912.6	903.3	893.5	883.5	873.5	863.5	853.5	843.5	1036.7	1026.7
7.	1124.8	1111.3	1084.9	1064.6	1052.5	1106.2	1141.2	1099.7	1075.9	1041.4	1017.3	993.7	1036.7	1026.7
8.	1050.	1006.7	999.4	982.6	1034.1	1075.8	1122.5	1142.8	1103.3	1081.4	1047.6	1017.9	1036.7	1026.7
9.	1040.7	1084.7	1029.7	1019.3	1012.7	1052.1	1096.6	1073.4	1041.4	1017.3	983.9	956.3	1036.7	1026.7
10.	1003.8	990.7	991.3	978.3	974.1	989.5	1036.	1035.	1017.3	1000.2	974.	942.6	1036.7	1026.7
11.	999.7	983.2	981.1	937.2	940.6	1001.3	1009.8	1042.2	1018.	988.8	958.5	923.6	1036.7	1026.7
12.	988.4	981.2	985.9	963.6	964.1	971.9	1009.7	1028.7	1008.8	987.5	957.3	923.6	1036.7	1026.7
13.	989.3	983.2	986.3	953.6	983.5	997.4	1019.9	1058.2	1051.2	1041.1	1028.	1025.3	1036.7	1026.7
14.	*992.6	1008.3	996.	999.	1002.2	1057.9	1067.9	1073.3	1072.	1043.2	1042.1	1039.3	1036.7	1026.7
15.	1064.9	1024.1	1058.	1030.6	1046.2	1053.5	1059.	1055.7	1053.4	1046.7	1042.	1049.3	1036.7	1026.7
16.	1045.4	1041.8	1036.5	1031.6	1038.8	1049.9	1056.8	1050.2	1068.7	1042.5	1042.	1025.9	1044.2	1032.2
17.	1031.2	1082.2	1026.2	1020.9	1031.5	1046.	1041.3	1033.9	1037.9	1014.4	1050.3	1035.	1035.1	1023.1
18.	1036.	1016.8	1022.	1017.5	1024.1	1047.7	1050.7	1035.2	1047.7	1048.2	1048.6	1051.5	1037.2	1023.8
19.	1042.	1035.7	1029.6	1013.3	1026.2	1046.3	1060.	1063.8	†1204.5	†1278.	†1303.7	†1303.7	1108.5	1053.9
20.	1176.3	1160.9	1149.2	1112.	1164.7	1205.3	1206.7	1209.5	1206.5	1197.	†1197.	†1198.3	1152.5	1146.5
21.	1149.6	1139.2	1125.3	1119.3	1126.4	1152.7	1154.4	1129.8	1123.1	1129.1	1106.4	1078.7	1128.	1120.2
22.	1113.1	1108.	1104.8	1094.6	1090.8	1113.2	1107.2	1110.8	1108.9	1105.5	1125.3	1111.7	1107.7	1112.4
23.	1105.4	1118.5	1114.6	1108.7	†1096.1	1140.9	1186.3	†154.	1136.1	1165.4	1213.7	1193.4	1144.6	1132.3
24.	1183.1	1168.7	1153.2	1158.1	1154.4	1165.1	1180.1	1179.4	1150.8	1160.8	1141.	1152.4	1163.3	1119.7
Means	1061.5	1051.3	1044.5	1034.2	1039.7	1067.	1066.7	1081.8	1074.5	1075.2	1076.4	1064.4	1063.2	
Reduced to 32° F.	1054.6	1046.8	1042.3	1034.5	1039.4	1066.4	1078.9	1069.5	1053.8	1057.9	1062.5	1051.5		1055.1

* Eight minutes later.

† Bar heated, to get correction for temperature.

FEBRUARY.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

[1841.

Göttingen time..... Observatory time	<i>h. m.</i> 6 03½ 0 33	<i>h. m.</i> 8 03½ 2 33	<i>h. m.</i> 10 03½ 4 33	<i>h. m.</i> 12 03½ 6 33	<i>h. m.</i> 14 03½ 8 33	<i>h. m.</i> 16 03½ 10 33	<i>h. m.</i> 18 03½ 12 33	<i>h. m.</i> 20 03½ 14 33	<i>h. m.</i> 22 03½ 16 33	<i>h. m.</i> 0 03½ 18 33	<i>h. m.</i> 2 03½ 20 33	<i>h. m.</i> 4 03½ 22 33	Means.
Feb. 1.....	36.8	36.1	35.9	35.8	35.7	36.	36.3	36.2	36.1	36.	36.4	36.4	36.1
2.....	36.3	36.1	36.	35.8	35.8	36.	37.	37.3	36.	36.	36.	36.3	36.3
3.....	38.	37.9	37.2	37.	37.5	38.	40.	41.	41.8	40.9	39.3	39.3	39.3
4.....	37.3	36.	34.9	33.9	33.9	34.2	35.4	36.8	37.	36.4	35.5	34.8	34.8
5.....	34.	33.	32.4	32.	32.	32.5	35.	37.2	39.	39.	38.5	38.	38.5
6.....	37.3	37.	36.3	36.2	36.4	37.	39.	37.4	41.	44.	43.3	41.6	41.6
7.....	37.2	36.3	35.3	34.2	33.7	35.	37.	39.	40.	40.5	40.	38.6	38.6
8.....	37.7	36.9	36.	35.7	35.3	35.5	35.5	36.	36.5	36.6	37.	36.6	36.6
9.....	36.3	35.6	34.7	34.	34.	35.6	39.5	39.	38.4	36.9	33.5	31.5	31.5
10.....	29.1	27.1	25.8	24.1	24.	25.	26.4	27.8	28.	28.	24.	21.7	21.7
11.....	19.3	17.9	16.3	15.1	15.2	19.	19.8	20.6	21.2	20.	19.3	18.2	18.4
12.....	17.3	16.1	15.1	14.6	15.2	17.	19.3	21.3	23.	22.7	22.4	23.	19.8
13.....	24.3	22.9	21.1	20.	19.6	21.6	24.	25.5	26.3	25.5	25.	24.	22.3
14.....	23.6	23.	22.3	22.	23.	25.	26.	30.2	32.	32.5	32.5	32.3	27.2
15.....	32.3	32.3	32.3	32.5	32.7	34.	36.2	37.6	38.5	38.5	37.5	36.4	34.2
16.....	38.	37.	35.8	34.6	34.	33.8	34.5	36.	37.5	37.5	37.	36.3	36.
17.....	36.	35.5	35.1	34.8	35.	35.	36.4	36.	37.2	37.5	37.5	37.	36.
18.....	36.	35.	33.9	32.9	33.	34.	36.	38.	40.	41.	41.	40.5	36.3
19.....	43.8	43.	42.1	41.1	40.8	42.	42.5	46.5	46.5	46.5	46.5	46.3	46.3
20.....	44.5	43.	41.7	40.6	41.	43.3	45.	47.6	48.	46.8	45.	43.8	44.
21.....	38.1	38.1	36.1	34.	34.	33.3	33.3	33.7	34.	33.	32.5	31.8	31.8
22.....	30.5	29.2	28.	26.7	27.	28.8	30.5	32.2	32.	32.5	32.7	30.1	30.1
23.....	33.4	33.4	33.6	33.8	34.3	36.5	39.2	42.6	45.	46.5	46.8	46.	39.1
24.....	45.9	45.7	45.2	45.3	45.5	46.	46.5	47.	47.5	47.	46.3	46.3	46.3
Means.....	34.3	33.5	32.6	32.	32.1	33.1	34.6	36.1	36.9	37.5	36.3	35.5	34.7

Degrees Fahrenheit.

* Bar heated, to get correction for temperature.

[1844.]

VERTICAL FORCE MAGNETOMETER.

March.]

Göttingen time... Observatory time	<i>h. m.</i> 5 57½ 0 17	<i>h. m.</i> 7 57½ 2 17	<i>h. m.</i> 9 57½ 4 17	<i>h. m.</i> 11 57½ 6 17	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 15 57½ 10 17	<i>h. m.</i> 17 57½ 12 17	<i>h. m.</i> 19 57½ 14 17	<i>h. m.</i> 21 57½ 16 17	<i>h. m.</i> 23 57½ 18 17	<i>h. m.</i> 1 57½ 20 17	<i>h. m.</i> 3 57½ 22 17	Means.	Reduced to 32° F.
Mar. 1.....	716.4	702.4	689.3	674.6	664.4	658.7	676.9	692.6	.....	.....	781.4	758.7	701.9	529.1.
2.....	718.9	718.9	693.6	677.7	670.5	661.9	732.8	773.9	820.	810.	795.9	782.6	740.7	524.7.
3.....	746.6	746.6	726.6	709.	698.8	695.	708.7	745.2	850.	885.	796.8	776.4	764.8	526.7.
4.....	761.4	741.6	727.8	703.7	690.5	692.	704.3	740.9	752.7	754.7	753.	727.7	739.2	537.5.
5.....	706.1	690.1	651.6	634.8	620.4	622.	693.3	690.5	605.8	601.3	661.8	598.	622.	547.8.
6.....	592.7	582.4	579.8	567.3	562.4	560.6	585.4	565.6	571.2	578.2	587.8	606.2	576.	538.3.
8.....	710.9	700.6	692.7	684.6	678.7	680.2	688.1	692.6	693.4	686.5	675.1	665.2	687.	549.3.
9.....	658.5	648.7	639.8	639.9	645.8	646.8	656.9	673.8	690.	697.7	694.4	685.5	682.8	545.4.
10.....	675.9	665.1	658.	649.4	643.8	645.3	648.9	653.1	650.6	644.	637.	630.	650.1	547.5.
11.....	624.7	621.3	618.9	610.8	610.8	627.4	659.6	678.5	690.5	699.3	702.6	+	649.3	535.9.
12.....	679.5	666.1	646.6	629.1	616.5	609.4	606.5	603.8	611.8	608.6	605.9	603.1	623.7	548.1.
13.....	600.9	601.2	605.1	613.7	618.7	628.1	645.	665.3	679.9	690.5	679.1	675.3	641.1	538.5.
15.....	645.7	620.6	603.6	553.	531.7	532.2	543.	569.3	587.8	599.1	603.4	612.5	583.5	544.4.
16.....	615.1	611.8	593.2	585.	580.6	583.7	591.9	579.4	576.	548.6	531.8	524.7	576.7	552.4.
17.....	538.1	516.5	507.5	499.2	493.3	500.1	529.	538.2	536.3	530.2	525.3	524.7	520.	549.7.
18.....	537.5	580.9	518.3	515.9	516.3	527.8	543.2	549.	555.9	571.9	581.7	592.9	544.3	534.9.
19.....	605.2	611.5	613.4	609.1	614.5	643.4	680.	670.7	742.8	760.	774.4	771.1	674.7	534.3.
20.....	773.	761.2	736.8	718.2	709.3	722.	751.9	772.3	833.	867.5	876.2	883.	783.9	546.7.
22.....	839.6	820.6	775.7	751.6	732.9	723.5	738.7	755.8	751.4	768.4	768.5	768.2	765.8	552.5.
23.....	755.4	776.1	756.9	746.2	754.5	779.2	809.	831.6	843.9	844.9	840.6	839.2	797.3	551.6.
24.....	806.4	794.5	766.3	748.1	730.8	741.	769.2	808.2	828.1	850.8	871.	874.3	799.1	544.
25.....	864.6	855.5	837.4	813.9	803.2	814.1	843.3	879.7	911.9	932.7	936.9	920.	867.8	554.6.
26.....	910.	890.1	868.7	832.5	818.	835.2	861.1	882.1	902.8	942.8	976.	974.4	890.4	552.9.
27.....	963.2	952.4	934.8	917.5	908.1	913.9	932.9	962.	992.	1018.	+	1027.	956.5	569.1.
29.....	970.2	945.1	919.1	896.9	870.6	849.1	829.3	809.8	790.3	767.8	750.	736.1	857.1	578.6.
30.....	770.5	762.6	755.	752.	748.	756.8	757.1	764.8	751.5	730.	746.9	736.1	753.6	555.2.
31.....	723.5	707.4	687.6	667.	658.	673.	705.8	.....	779.9	777.9	767.6	750.9	719.1	558.8.
Means.....	723.1	712.3	696.	680.8	672.6	678.4	693.7	707.7	732.3	736.6	726.1	738.3	707.22	
Reduced to 32° F.	557.1	557.1	554.3	549.9	544.4	538.0	531.7	525.5	536.2	549.	553.3	556.8		545.76

* Thirty-two minutes late, 735. † Forty-nine minutes late, 689. ‡ Forty minutes late, 1028.4. § Forty-three minutes late, 766.4.

[1841.

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

March]

Göttingen time..... Observatory time.....	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.
Mar. 1.....	45.3	44.4	43.6	42.7	42.	42.5	44.	45.1	....	....	50.	48.	44.8
2.....	....	45.7	44.1	43.1	43.	45.	49.	51.8	54.	52.	50.8	49.8	48.
3.....	48.9	47.4	46.	45.	44.3	45.	47.3	50.2	59.5	52.8	50.9	49.8	48.9
4.....	48.8	47.2	45.5	44.6	44.2	44.2	46.	47.8	47.8	48.5	46.3	44.	46.2
5.....	43.	41.	39.	37.	36.	35.6	36.2	37.2	36.6	36.6	36.	36.	37.5
6.....	35.5	34.8	34.	33.8	33.	33.4	34.1	34.8	34.8	35.	37.	38.	34.8
7.....	43.8	43.	42.4	42.	41.8	42.	42.5	43.5	43.5	41.8	40.9	40.	42.2
8.....	40.1	39.5	38.9	38.4	39.	40.	41.	42.5	43.5	42.8	42.	41.	40.7
9.....	41.	40.6	40.	39.7	39.5	39.5	40.	40.4	40.	38.8	38.3.	38.	39.6
10.....	38.	37.9	37.5	37.1	37.5	39.5	42.	43.	44.	44.6	43.	....	40.4
11.....	41.1	40.	38.9	37.8	37.	36.5	37.	37.5	37.4	36.3	36.3	36.	37.6
12.....	36.8.	36.9	37.2	37.8	38.	39.	40.5	42.3	42.2	41.8	42.	41.2	39.6
13.....	37.2	36.3	35.7	32.	31.3	32.	31.4	36.	37.	36.9	36.9	36.2	34.9
14.....	36.3	36.	35.5	35.	34.9	35.	35.3	35.	35.	33.4	29.4	28.9	33.8
15.....	30.9	30.1	29.7	28.9	28.9	30.2	30.	30.	30.	29.	29.	31.	29.8
16.....	31.	30.8	30.7	30.6	30.8	31.9	32.8	33.7	34.4	34.8	36.4	36.	33.7
17.....	37.1	37.2	37.1	36.8	38.	40.2	43.2	46.3	47.8	49.1	48.9	47.7	42.4
18.....	47.	45.8	44.3	43.9	44.	45.5	48.8	53.	54.	55.8	56.4	56.5	49.5
19.....	51.1	49.5	47.5	46.	44.9	45.5	47.4	49.	49.4	48.8	48.	47.	47.8
20.....	46.9	46.3	46.4	46.8	48.4	50.3	52.4	54.	54.6	53.7	52.2	51.	50.2
21.....	50.2	48.8	47.2	45.9	45.9	47.5	50.4	52.9	55.	56.3	56.	55.1	50.9
22.....	54.1	53.	51.4	50.5	50.8	52.5	55.	58.	60.	59.7	58.6	58.3	56.2
23.....	56.5	55.	53.	51.5	51.5	53.2	57.	59.8	61.5	63.	61.7	61.	57.
24.....	60.1	59.1	58.2	57.3	57.	58.3	60.3	62.8	64.8	64.8	....	64.8	60.7
25.....	60.	58.3	57.	55.3	53.	52.	50.3	50.	49.5	48.7	48.	....	53.
26.....	47.8	47.2	46.9	46.3	46.5	47.3	47.3	47.2	47.3	46.8	45.9	44.8	46.7
27.....	44.1	42.8	41.	40.	40.	42.	44.3	....	43.7	47.6	46.	45.	43.8
28.....	44.3	43.5	42.5	41.7	41.5	42.4	44.	45.5	46.6	45.9	44.8	45.	43.96
Means.....	44.3	43.5	42.5	41.7	41.5	42.4	44.	45.5	46.6	45.9	44.8	45.	43.96

Degrees Fahrenheit.

Marcs.]

HORIZONTAL FORCE MAGNETOMETER.

[1841.]

[97]

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Göttingen time. Observatory time	h. m. 0 22	h. m. 2 22	h. m. 4 22	h. m. 6 22	h. m. 8 22	h. m. 10 22	h. m. 12 22	h. m. 14 22	h. m. 16 22	h. m. 18 22	h. m. 20 22	h. m. 22 22	h. m. 24 22	Means.	Reduced to 32° F.
Mar. 1	1143.	1141.9	1130.1	1129.1	1139.7	1136.6	1142.8	1141.	1162.5	1170.	1161.1	1163.4	1146.3	1107.3	
2	1156.8	1146.3	1134.9	1128.7	1140.1	1151.3	1151.3	1171.5	1158.7	1172.5	1162.8	1163.9	1152.	1107.9	
3	1144.1	1139.7	1133.6	1136.	1141.5	1151.8	1164.4	1155.4	1131.5	1165.	1165.7	1150.5	1150.1	1105.1	
4	1134.5	1130.8	1117.7	1099.8	1101.	1111.8	1090.4	1080.2	1096.3	1103.2	1134.7	1139.8	1115.	1098.9	
5	1105.	1104.6	1111.9	1093.2	1105.3	1117.1	1108.8	1089.2	1076.5	1100.	1100.	1151.3	1105.2	1098.6	
6	1141.8	1126.9	1117.4	1116.3	1145.1	1169.6	1157.1	1134.3	127.7	1153.	1149.3	1121.6	1135.6	1105.9	
7	1109.	1113.9	1112.	1104.8	1115.1	1135.3	1134.8	1130.6	1120.	1109.4	1125.7	1125.1	1119.6	1095.3	
8	1106.2	1108.9	1104.1	1094.7	1108.6	1125.9	1136.1	1126.	1125.2	1109.1	1100.3	1112.8	1113.2	1091.3	
9	1116.3	1106.5	1096.2	1091.2	1094.7	1113.4	1117.7	1103.7	1125.	1145.2	1111.1	1110.9	1087.5	1091.6	
10	1121.	1130.	1092.5	1096.	1102.3	1117.	1134.1	1105.1	1096.9	1098.8	1096.3	1096.7	1107.2	1091.6	
11	1092.4	1091.1	1091.3	1094.4	1117.2	1151.5	1151.4	1130.9	1118.7	1118.9	1116.8	1117.1	1116.	1093.2	
12	1213.	1167.	1172.7	1139.7	1145.5	1196.6	1203.3	1117.5	1135.5	1162.2	1140.4	1150.8	1161.2	1154.9	
13	1147.	1159.9	1129.9	1108.1	1105.5	1161.9	1196.6	1107.8	1142.8	1151.	1137.6	1104.8	1137.7	1131.1	
14	1093.4	1097.4	1096.	1094.9	1101.	1158.1	1136.3	1133.	1096.	1133.4	1121.3	1132.8	1116.1	1123.	
15	1124.6	1109.3	1102.3	1087.7	1120.8	1138.6	1149.7	1113.7	1126.1	1112.9	1117.	1112.7	1117.9	1116.4	
16	1117.9	1116.8	1123.8	1114.	1150.6	1174.	1181.5	1165.	1153.5	1156.7	1163.8	1160.	1148.1	1116.6	
17	1158.	1143.3	1162.9	1151.	1150.9	1166.9	1181.7	1158.4	1186.4	1167.9	1220.8	1205.3	1171.1	1119.2	
18	1186.9	1179.7	1141.8	1130.1	1163.	1253.6	1242.9	1125.5	1257.2	1173.	1206.	1132.7	1182.6	1136.7	
19	1163.	1223.6	1180.5	1173.7	1203.2	1216.3	1239.3	1202.	1197.8	1219.3	1193.4	1242.9	1206.5	1152.8	
20	1167.	1162.4	1173.8	1155.9	1159.9	1194.2	1180.4	1159.3	1204.1	1234.7	1260.8	1219.2	1189.3	1134.4	
21	1205.2	1179.6	1176.3	1179.1	1189.7	1207.7	1212.7	1184.8	1209.	1209.7	1229.	1231.5	1200.5	1132.7	
22	1207.4	1151.7	1180.9	1170.	1177.3	1214.4	1230.8	1233.1	1217.8	1206.7	1210.	1190.2	1201.7	1127.9	
23	1171.	1195.3	1186.	1181.7	1193.	1231.3	1257.8	1238.1	1214.2	1207.4	1234.5	1211.	1207.8	1121.4	
24	1202.9	1193.1	1183.5	1166.	1169.	1185.4	1186.5	1194.6	1124.6	1169.1	1234.5	1211.	1177.3	1116.1	
25	1153.9	1146.2	1149.6	1150.1	1153.8	1200.7	1163.7	1151.1	1159.8	1160.4	1153.1	1140.8	1157.1	1114.8	
26	1137.9	1135.1	1123.4	1120.6	1139.3	1153.1	1154.2	1149.6	1146.8	1147.7	1138.3	1142.2	1140.7	1105.9	
27	1147.7	1143.4	1135.5	1127.1	1139.4	1166.	1168.8	1144.4	1153.6	1154.8	1154.2	1152.8	1148.94		
28	1112.	1110.7	1105.8	1100.1	1111.8	1136.3	1134.9	1106.	1111.9	1113.7	1116.1	1114.4		1114.47	

* Thirty-four minutes late, 1155. † Forty-seven minutes late, 1122. ‡ Nine minutes late. § Forty minutes late, 1212.1. ¶ Thirty-five minutes late, 1148.

[1941.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

Mars.]

Göttingen time..... Observatory time.....	h. m. 6 02½ 0 22	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	Meapa.
Mar. 1.....	45.1	44.1	43.1	42.1	41.9	42.	44.	45.3	47.5	49.	48.	47.8	45.
2.....	.....	45.2	43.5	42.3	42.5	43.5	46.8	49.3	51.1	50.8	50.3	49.	46.7
3.....	48.1	47.	45.4	44.3	43.8	44.5	46.8	47.8	49.3	50.8	49.8	49.	47.
4.....	47.6	46.3	45.	43.8	43.6	43.5	44.5	46.	48.5	46.5	46.	49.5	46.2
5.....	42.1	40.1	38.	35.9	34.7	34.5	35.	36.	36.8	35.	35.	35.	36.4
6.....	34.7	34.	33.	32.9	32.5	32.8	33.3	34.	34.3	35.1	36.5	38.	34.2
8.....	43.8	42.9	42.1	41.7	41.5	41.5	42.5	43.2	43.	41.8	40.3	39.5	41.9
9.....	39.1	38.7	38.	37.4	38.3	39.	40.	41.8	43.	42.6	43.	41.	40.1
10.....	40.5	39.8	39.1	38.8	38.8	39.	39.8	40.2	40.	38.9	38.3	38.	39.3
11.....	37.8	37.2	37.	36.4	37.	38.	41.	42.5	43.5	43.3	42.8	....	39.8
12.....	40.8	39.4	38.1	36.9	36.2	36.	37.	37.	37.	36.1	30.	36.	37.3
13.....	36.	36.2	37.	37.7	38.	39.3	41.	42.4	42.7	42.	42.	41.3	39.6
15.....	37.	34.7	32.7	31.1	30.	30.5	32.5	35.	36.5	36.4	36.3	36.	34.1
16.....	36.	35.4	35.	34.8	34.3	35.	36.	35.4	35.	31.9	31.	30.5	34.2
17.....	30.1	29.7	29.	28.2	28.2	30.	30.	30.2	30.3	29.2	30.8	31.	29.7
18.....	30.8	30.3	30.1	30.	30.3	31.5	32.6	33.7	34.5	35.	35.4	36.	32.5
19.....	37.4	37.7	37.2	37.	38.5	40.7	43.	45.5	47.8	49.	49.	47.	43.5
20.....	47.	45.8	44.2	43.2	44.	45.2	48.	51.4	53.9	55.6	56.8	57.	49.3
22.....	51.	48.9	47.	45.2	44.9	45.	46.3	48.	49.	48.	47.5	46.4	47.3
23.....	46.2	46.	45.9	46.	47.5	49.5	53.	54.	55.	53.8	52.2	50.7	49.9
24.....	49.3	47.9	46.2	45.	46.3	47.	49.	51.7	55.	56.	55.8	55.	50.3
25.....	54.	52.6	51.	50.	50.	51.5	53.5	56.7	60.	60.	59.	57.3	54.6
26.....	56.2	54.3	52.2	50.9	52.	53.	56.	58.4	61.3	62.	61.7	61.	56.6
27.....	60.	59.	57.9	57.	58.	59.	60.3	63.	65.	65.	....	64.7	60.8
29.....	58.1	56.3	54.8	53.	53.	51.4	50.3	49.	48.5	47.7	47.	....	52.4
30.....	46.8	46.3	46.	45.8	46.	46.7	46.9	46.5	46.9	46.	45.7	44.	46.1
31.....	43.7	42.1	40.2	39.	41.	41.4	43.3	45.4	48.	47.3	46.3	45.	43.6
Means.....	43.9	42.9	41.9	41.	41.3	41.9	43.3	44.8	45.9	45.7	44.7	44.8	43.49

Degrees Fahrenheit.

MARCH.]

TRIPLE OBSERVATIONS.

[1841.

[97]

202

	Declination.			Vertical force.			Horizontal force.			Tempera- ture Fah- renheit.
	<i>h. m.</i> 13 52½ 8 12	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 07½ 8 27	<i>h. m.</i> 13 50 8 09½	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 14 05 8 24½	<i>h. m.</i> 13 55 8 14½	<i>h. m.</i> 14 02½ 8 22	<i>h. m.</i> 14 10 8 29½	
Göttingen time.....										
Observatory time.....										
Mar. 1.....	574.4	578.4	579.8	684.	684.4	683.7	1142.	1133.7	1134.1	41.9
2.....	587.2	587.9	587.8	670.7	670.5	670.3	1138.5	1140.1	1141.7	42.5
3.....	586.4	585.1	584.8	700.2	698.8	698.7	1144.	1141.5	1141.1	43.8
4.....	586.9	587.2	587.1	690.7	690.5	690.1	1136.	1136.5	1139.5	43.6
5.....	586.2	586.2	586.2	606.7	606.4	604.5	1096.9	1101.	1102.5	34.7
6.....	586.8	586.6	586.8	563.1	562.4	561.8	1101.9	1105.3	1105.4	32.5
8.....	588.9	588.7	589.	679.1	678.7	678.8	1144.3	1145.1	1146.9	41.5
9.....	590.	590.7	588.9	630.4	630.9	631.	1116.2	1115.1	1115.	38.3
10.....	587.4	588.	587.3	644.	643.8	643.7	1107.7	1108.6	1108.9	38.8
11.....	586.8	586.2	584.8	610.1	610.3	616.2	1098.1	1094.7	1091.7	37.
12.....	583.3	584.2	583.6	615.7	615.5	614.2	1107.6	1102.3	1101.8	36.2
13.....	586.9	586.6	586.8	618.3	618.7	619.7	1113.6	1117.2	1121.3	38.
15.....	584.9	586.7	591.6	531.9	531.7	531.8	1138.2	1145.5	1137.6	39.
16.....	591.9	592.7	592.1	580.9	580.6	580.6	1105.	1105.5	1105.8	34.3
17.....	586.8	586.9	586.3	493.8	493.3	493.3	1098.5	1101.	1102.2	28.2
18.....	584.8	584.8	584.1	516.1	516.3	516.9	1117.1	1120.8	1128.5	30.2
19.....	585.3	585.2	585.1	613.2	614.5	615.8	1151.8	1150.6	1151.7	38.5
20.....	580.	579.5	580.3	709.1	709.3	710.1	1157.3	1150.9	1153.	44.
22.....	608.1	600.4	604.2	734.9	732.9	732.5	1173.8	1173.8	1165.4	44.9
23.....	576.	575.5	576.6	754.1	754.9	755.2	1210.3	1203.2	1210.2	47.5
24.....	589.7	592.4	592.8	730.6	730.8	730.1	1159.9	1159.9	1159.7	46.3
25.....	.....	588.6	.....	.....	803.2	.....	.....	1188.7	.....	50.
26.....	590.	587.8	589.2	819.	818.	818.	1169.3	1177.3	1179.7	52.
27.....	587.7	587.2	587.9	908.3	908.1	908.6	1189.8	1193.	1196.2	58.
28.....	586.2	585.8	585.1	871.	870.6	869.	1171.	1169.	1173.8	53.
30.....	565.	584.4	584.	747.8	748.	748.1	1151.	1153.8	1154.2	46.
31.....	585.	584.6	583.6	688.2	688.	688.3	1139.4	1139.3	1139.5	41.

Göttingen time. Observatory time.	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.	Reduced to 39° F.
April 1.....	737.3	727.	719.6	716.8	719.8	732.7	749.8	.....	831.7	839.2	852.6	853.4	770.	559.4
2.....	847.4	839.	830.3	819.	816.5	833.6	870.6	902.3	931.4	951.1	951.5	926.1	876.6	566.1
3.....	882.9	841.3	803.1	778.2	768.3	767.5	775.6	780.9	796.6	812.9	824.3	816.4	804.	567.8
5.....	779.6	790.8	799.3	803.1	805.2	817.3	832.2	856.4	874.5	896.	898.3	890.6	886.9	560.2
6.....	873.1	856.5	840.4	835.5	814.7	814.5	828.9	.....	877.7	875.6	871.9	865.4	848.6	573.2
7.....	837.	829.9	804.6	793.	787.7	794.	802.3	805.	816.9	830.9	843.8	845.	815.8	566.1
8.....	841.4	824.1	826.9	809.3	797.1	789.	802.2	803.5	823.	850.1	863.6	861.3	824.3	566.5
9.....	846.4	823.7	804.5	788.8	783.5	795.8	824.	854.9	.....	952.8	968.7	974.	866.1	567.2
10.....	973.1	970.5	953.6	926.1	895.6	880.9	864.1	844.3	822.	798.3	781.	761.6	872.6	568.1
12.....	721.7	708.	699.4	689.4	679.7	672.	680.	677.1	666.	657.9	652.6	641.8	678.8	568.6
13.....	.....	628.9	624.7	621.9	629.6	666.3	724.3	.....	.....	822.8	799.4	777.7	699.5	565.9
14.....	765.5	751.5	736.4	723.7	714.9	728.6	758.6	.....	801.8	805.5	798.6	783.8	760.8	574.5
15.....	767.4	732.1	707.8	687.9	683.4	692.5	715.4	.....	.....	834.9	804.9	786.4	739.3	578.7
16.....	766.9	745.9	725.5	707.1	702.6	722.4	770.1	750.	839.3	838.	839.5	838.3	770.5	566.7
17.....	823.4	811.9	804.3	799.2	798.8	809.8	821.4	832.5	854.5	840.	885.	903.8	832.	579.6
19.....	878.8	862.5	810.3	794.2	792.5	780.5	794.7	808.1	828.	837.3	857.9	852.2	821.8	581.5
20.....	853.3	829.3	827.2	807.1	795.8	804.8	810.9	812.5	811.	831.8	829.8	836.1	820.	581.
21.....	858.9	839.	839.3	841.5	846.1	859.1	876.7	901.4	906.	899.3	888.1	883.3	876.2	591.4
22.....	860.7	845.5	837.1	819.6	818.	830.1	834.9	836.5	835.4	829.2	833.5	820.4	833.4	579.6
23.....	821.	806.8	802.1	796.2	798.6	814.	843.6	855.	865.1	879.9	886.7	886.1	837.8	575.9
24.....	885.7	874.8	871.3	867.6	867.7	875.9	884.6	894.7	963.5	947.6	948.	950.3	902.6	584.
26.....	969.8	954.1	936.5	924.	917.	922.2	932.5	947.1	931.	934.8	943.2	981.9	946.7	584.9
27.....	973.9	962.2	948.	931.8	926.	925.5	925.6	925.2	931.	924.8	915.5	915.5	936.9	592.7
28.....	869.	869.	843.3	823.	819.6	832.7	857.2	879.1	904.1	927.9	924.1	928.7	875.1	575.4
29.....	922.	900.3	876.7	858.5	850.2	860.1	841.3	839.4	814.3	806.2	803.1	803.	846.4	584.5
30.....	1	806.7	799.5	801.	807.9	820.9	838.8	835.	842.2	843.4	839.1	828.9	823.	573.3
Means.....	848.7	824.3	810.4	797.8	793.	801.1	816.9	838.8	850.8	857.7	860.5	853.9	828.4	
Reduced to 39° F.	596.8	592.6	580.9	577.8	570.3	568.9	549.6	569.4	564.6	572.9	593.8	589.3		574.7

* Twenty-five minutes late, 930.1.

† One minute late.

‡ Three minutes late.

§ Four minutes late.

| Fifty-nine minutes late, 805.1.

[1841.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

April.]

Göttingen time.....	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.
April 1.....	44.8	44.1	44.	44.	44.3	45.2	46.8	...	52.	53.	53.	52.8	47.6
2.....	53.4	51.9	51.1	50.3	51.	53.	56.3	58.5	60.	59.9	59.8	56.	56.
3.....	53.8	51.	48.3	46.9	48.4	47.	48.5	49.5	50.5	51.3	51.	50.	49.5
5.....	49.2	49.9	50.1	50.2	50.2	51.	53.3	54.3	54.8	56.	55.2	54.3	52.5
6.....	53.9	51.7	50.9	50.9	50.8	50.8	53.3	...	54.8	54.3	52.	52.	52.4
7.....	51.2	50.1	49.2	48.8	49.	49.	50.	50.7	51.5	52.	52.5	52.	50.5
8.....	51.3	50.6	49.9	49.1	48.6	48.5	50.	51.4	52.	54.	53.8	52.8	51.1
9.....	51.8	50.3	49.2	48.7	49.	50.4	52.5	55.3	...	59.9	60.	60.	52.4
10.....	60.	59.2	57.7	55.5	54.	52.6	52.	51.	48.8	47.	46.	44.3	52.3
12.....	42.8	42.	41.1	40.8	40.	39.5	41.	40.	40.	38.9	38.	38.2	40.2
13.....	...	37.	37.	36.5	38.	41.5	45.3	...	49.2	49.	47.	45.9	41.9
14.....	45.7	45.	44.	43.1	43.2	43.7	47.	...	49.2	48.9	47.7	45.8	45.8
15.....	44.9	43.	41.7	40.5	41.	41.8	43.7	...	...	48.9	47.5	46.2	43.9
16.....	45.5	44.	42.6	41.7	42.2	44.4	48.5	51.5	51.9	51.7	51.	50.	47.1
17.....	49.2	48.6	48.3	48.1	48.6	49.5	50.3	52.	52.	54.8	55.	55.	50.9
19.....	52.	50.	48.	46.3	46.5	47.5	49.	50.3	52.	52.8	51.9	50.9	49.8
20.....	50.2	49.2	48.3	47.9	48.3	49.	49.7	50.	51.	51.	51.	51.	49.7
21.....	51.1	51.1	51.2	51.	52.	52.9	54.7	56.	58.	54.7	54.	52.1	53.1
23.....	52.6	51.	50.	49.7	50.6	50.7	51.6	51.5	51.5	50.6	50.	49.3	50.8
23.5.....	49.3	49.	48.8	48.7	49.2	50.6	52.3	53.	54.	54.	54.	54.	51.4
24.....	54.1	53.2	53.2	53.	53.	54.	54.8	56.	59.6	58.8	59.	58.8	55.6
26.....	59.3	58.3	57.2	56.9	56.5	57.	57.6	59.	61.1	61.3	61.1	60.1	58.8
28.....	59.5	58.4	57.8	57.	57.	57.	57.5	58.	58.2	58.	56.9	55.2	57.5
27.....	54.2	52.6	51.	50.	50.6	52.	54.	56.	58.	58.	57.7	56.8	54.2
29.....	56.1	54.8	53.1	52.	52.1	51.2	50.6	49.9	49.7	49.1	49.	49.	51.4
30.....	...	49.6	49.2	49.1	50.	50.4	51.2	52.	51.7	51.7	50.9	49.6	50.5
Means.....	51.4	49.9	49.	48.3	48.5	49.2	51.8	52.7	53.2	53.1	52.5	51.6	50.8

Degrees Fahrenheit.

Göttingen time... Observatory time	h. m. 0 22	h. m. 2 22	h. m. 4 22	h. m. 6 22	h. m. 8 22	h. m. 10 22	h. m. 12 22	h. m. 14 22	h. m. 16 22	h. m. 18 22	h. m. 20 22	h. m. 22 22	h. m. 24 22	Means.	Reduced to 32° F.
April 1.	1134.3	1133.8	1128.1	1128.8	1135.9	1165.6	1188.7	1161.	1151.6	1152.	1148.4	1148.7	1148.1	1148.1	1101.
2.	1145.3	1144.	1139.1	1134.	1151.3	1193.6	1220.7	1199.8	1177.7	1173.3	1171.5	1166.6	1168.1	1168.1	1098.2
3.	1156.3	1133.6	1086.9	1139.5	1140.3	1194.5	1206.5	1165.	1155.2	1170.4	1190.1	1175.3	1159.6	1159.6	1108.9
4.	1145.9	1147.2	1140.3	1140.3	1168.3	1204.6	1223.7	1163.4	1160.6	1160.	1163.6	1157.2	1167.2	1167.2	1106.
5.	1160.4	1156.1	1147.	1143.8	1173.7	1219.9	1220.7	1163.4	1150.2	1147.1	1158.6	1153.	1166.2	1166.2	1105.9
6.	1143.8	1154.7	1140.9	1132.2	1162.7	1188.6	1188.	1151.2	1142.2	1147.9	1153.5	1154.2	1155.	1155.	1099.8
7.	1161.8	1141.8	1134.2	1155.7	1203.5	1211.6	1271.5	1154.1	1142.2	1164.9	1175.	1175.2	1176.9	1176.9	1120.2
8.	1153.1	1156.4	1144.1	1136.	1157.7	1197.4	1230.9	1204.5	1166.7	1175.	1189.5	1181.6	1173.	1173.	1107.3
9.	1138.	1182.9	1165.8	1161.	1177.3	1200.5	1176.	1148.2	1129.3	1125.	1120.8	1118.1	1157.6	1157.6	1097.3
10.	1186.	1128.1	1111.2	1114.	1131.9	1207.8	1178.5	1159.2	1124.2	1141.3	1136.2	1140.	1137.5	1137.5	1114.4
11.	1139.	1109.1	1103.6	1098.	1138.4	1141.4	1173.3	1156.2	1145.3	1143.6	1142.6	1144.7	1136.	1136.	1103.9
12.	1144.6	1141.7	1132.	1124.8	1137.5	1188.9	1200.9	1137.1	1138.9	1139.1	1168.5	.....	1150.4	1150.4	1109.
13.	1155.7	1137.8	1125.8	1111.8	1125.5	1145.7	1145.6	1121.1	1124.1	1136.2	1188.7	1153.7	1135.1	1135.1	1100.3
14.	1137.8	1134.9	1123.6	1110.5	1143.1	1147.4	1147.2	1145.	1137.8	1155.7	1163.	1124.9	1139.2	1139.2	1095.4
15.	1118.4	1116.	1113.1	1121.5	1136.9	1149.3	1207.3	1188.7	1157.4	1159.5	1213.9	1217.9	1166.7	1166.7	1110.
16.	1300.	1199.7	1160.3	1152.6	1152.1	1211.	1177.6	1157.	1165.3	1201.3	1185.2	1219.	1181.8	1181.8	1130.8
17.	1306.6	1179.4	1173.	1147.4	1184.8	1210.7	1251.4	1168.	1192.7	1199.3	1174.	1191.1	1189.9	1189.9	1137.7
18.	1212.1	1177.	1201.	1156.9	1195.9	1222.6	1196.4	1177.7	1173.6	1186.3	1201.4	1159.9	1188.4	1188.4	1125.7
19.	1180.7	1181.	1163.1	1162.3	1187.2	1211.1	1204.2	1176.9	1163.5	1204.	1178.1	1176.	1183.9	1183.9	1129.9
20.	1157.7	1164.3	1155.	1155.1	1184.2	1233.4	1208.8	1170.7	1177.	1163.9	1177.6	1177.	1176.2	1176.2	1118.3
21.	1163.	1170.9	1158.2	1162.2	1170.3	1241.4	1212.2	1193.4	1207.8	1201.1	1229.	1205.9	1192.9	1192.9	1122.1
22.	1218.	1216.1	1203.8	1193.2	1203.1	1208.7	1187.3	1178.	1198.8	1211.8	1224.5	1223.4	1205.6	1205.6	1125.2
23.	1243.2	1210.7	1209.9	1193.1	1208.4	1167.7	1150.	1142.	1157.	1178.	1191.9	1184.3	1188.	1188.	1112.1
24.	1173.8	1167.2	1153.4	1146.1	1163.9	1180.8	1173.2	1158.8	1157.	1178.7	1202.7	1193.3	1170.7	1170.7	1105.8
25.	1177.3	1171.8	1162.4	1170.6	1183.	1197.9	1179.9	1146.1	1132.9	1138.5	1150.6	1142.1	1162.5	1162.5	1105.5
26. ....	.....	1136.7	1129.	1113.8	1172.1	1167.3	1162.	1150.7	1146.8	1145.6	1165.2	1141.7	1148.3	1148.3	1094.
Means	1167.2	1157.4	1146.4	1142.6	1165.	1191.1	1195.	1164.8	1158.	1169.2	1173.	1169.	1166.54	1166.54	
Reduced to 32° F.	1109.6	1103.4	1096.9	1095.4	1121.8	1140.4	1140.4	1105.1	1095.6	1105.9	1111.2	1109.6			1111.04

* Two minutes late.

[1841.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

April.]

	<i>h.</i> m. 6 02½ 0 22	<i>h.</i> m. 8 02½ 2 22	<i>h.</i> m. 10 02½ 4 22	<i>h.</i> m. 12 02½ 6 22	<i>h.</i> m. 14 02½ 8 22	<i>h.</i> m. 16 02½ 10 22	<i>h.</i> m. 18 02½ 12 22	<i>h.</i> m. 20 02½ 14 22	<i>h.</i> m. 22 02½ 16 22	<i>h.</i> m. 0 02½ 18 22	<i>h.</i> m. 2 02½ 20 22	<i>h.</i> m. 4 02½ 22 22	Means.
Göttingen time.....	44.6	44.	43.7	43.5	44.	45.	46.6	49.	52.	53.5	53.3	52.8	47.7
Observatory time.....	52.3	51.7	50.8	50.	52.	53.2	56.3	59.5	61.	60.9	59.6	56.3	55.3
April 1,.....	52.9	49.8	47.	46.3	49.	47.	47.	47.	50.	51.	50.6	49.3	48.9
2,.....	48.8	49.2	49.9	50.	50.5	51.3	52.4	54.	57.	56.3	55.7	54.3	53.4
3,.....	53.4	52.1	51.	50.	49.6	50.2	51.5	53.2	54.5	54.8	53.1	52.	52.1
4,.....	50.8	49.3	48.5	48.	48.3	49.	50.	51.	52.	52.7	52.9	52.	50.4
5,.....	51.3	50.	49.1	48.4	48.	48.2	49.8	51.4	53.4	54.	54.	52.8	50.9
6,.....	51.5	49.9	48.8	48.	49.6	51.	52.8	55.5	59.4	60.1	60.3	60.1	59.9
7,.....	60.2	59.7	57.8	56.4	53.4	52.	51.5	51.2	48.	46.3	45.5	43.9	52.1
8,.....	42.2	41.2	40.7	40.	39.5	39.5	40.5	40.	39.5	38.9	38.	37.	39.7
9,.....	.....	36.5	36.	35.8	37.8	40.9	44.8	47.	48.8	48.4	47.4	46.	49.7
10,.....	45.8	44.9	43.9	43.	43.	43.9	46.	47.8	48.4	49.	47.7	.....	45.8
11,.....	44.3	42.7	40.9	40.	41.4	42.	42.5	44.	45.9	47.2	46.9	46.	43.6
12,.....	45.2	43.9	42.1	41.2	43.3	44.1	46.7	48.8	50.3	52.	51.4	50.	48.6
13,.....	49.	48.2	47.9	47.7	48.	49.	50.	52.	53.2	55.	55.1	55.3	50.9
14,.....	51.2	49.	48.8	48.	46.6	46.6	47.5	49.	51.	52.3	52.	50.8	49.4
15,.....	50.	48.9	48.	47.1	48.	48.2	49.	49.9	50.6	51.	51.	51.7	53.9
16,.....	51.	51.	51.	50.9	51.6	52.5	54.6	56.	56.	55.	53.6	51.7	50.9
17,.....	51.4	49.5	49.8	48.	49.	50.1	50.7	51.	51.	50.1	49.5	49.	51.3
18,.....	49.9	48.2	48.	48.	49.	50.	52.	53.	54.	54.7	54.8	54.5	51.3
19,.....	54.3	53.4	53.	52.9	52.9	53.5	56.	56.	59.5	58.8	59.	59.	55.6
20,.....	59.5	58.3	57.1	56.3	56.	56.	57.	59.	61.4	62.	62.	60.8	58.8
21,.....	59.9	58.5	57.5	56.9	56.	56.5	57.	57.3	58.	58.	56.9	56.	57.3
22,.....	53.4	51.8	49.8	49.	50.	51.	53.5	56.	58.	58.	58.	57.	53.8
23,.....	56.	54.3	52.8	51.5	51.	50.	50.1	49.7	49.1	48.9	48.6	48.6	51.
24,.....	.....	48.8	48.4	48.2	49.	50.	51.	51.8	51.8	51.7	50.6	49.3	50.1
Means.....	51.2	50.	48.5	47.7	46.4	48.9	50.2	51.9	52.8	53.1	52.6	51.8	50.5

Degrees Fahrenheit.

April.]

TRIPLE OBSERVATIONS.

[1841.]

[97]

208

	Declination.			Vertical force.			Horizontal force.			Temperature Fahrenheit.
	<i>h. m.</i> 13 52½ 8 12	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 07½ 8 27	<i>h. m.</i> 13 50 8 09½	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 14 05 8 24½	<i>h. m.</i> 13 55 8 14½	<i>h. m.</i> 14 02½ 8 22	<i>h. m.</i> 14 10 8 29½	
Göttingen time.....										
Observatory time.....										
April 1.....	589.3	589.8	589.5	719.5	719.8	720.1	1135.8	1135.9	1137.	44.
2.....	591.6	591.4	591.8	816.	816.5	816.8	1149.2	1151.3	1154.5	52.
3.....	584.1	586.7	587.9	768.	768.3	768.5	1143.3	1140.3	1141.1	49.
5.....	589.	588.5	587.9	805.	805.2	805.6	1162.6	1168.3	1170.2	50.5
6.....	592.	592.5	592.5	815.8	814.7	814.3	1172.	1173.7	1176.3	49.6
7.....	587.7	588.6	591.4	787.8	787.7	788.	1156.5	1162.7	1165.8	48.3
8.....	578.2	577.7	578.6	797.1	797.1	797.	1202.6	1203.5	1203.3	48.
9.....	591.2	591.3	590.5	783.4	783.5	783.	1156.8	1157.7	1159.	49.6
10.....	.....	586.4	587.	.....	895.6	894.5	.....	1177.3	1179.3	53.4
12.....	588.6	588.7	588.	679.3	679.7	679.2	1128.	1131.9	1135.5	39.5
13.....	575.1	572.8	573.	828.3	829.6	830.9	1140.	1136.4	1135.4	37.8
14.....	589.9	590.	590.2	714.9	714.9	715.4	1135.	1137.5	1143.1	43.
15.....	586.1	586.1	586.2	682.5	683.4	683.6	1125.4	1125.5	1128.7	41.4
16.....	582.7	582.3	582.5	702.5	702.6	703.7	1139.3	1143.1	1145.9	43.3
17.....	589.2	589.	588.1	798.	798.8	798.6	1136.7	1136.9	1137.4	48.
19.....	587.6	587.3	587.9	772.2	772.5	772.5	1147.8	1152.1	1153.1	46.6
20.....	590.4	588.2	585.4	796.	795.8	794.8	1184.8	1184.8	1182.3	48.
21.....	588.4	588.	587.8	845.6	846.1	846.6	1197.	1195.9	1201.3	51.6
22.....	.....	585.7	.....	.....	818.	.....	.....	1187.3	.....	49.
23.....	590.	590.	588.7	798.	798.6	799.6	1179.1	1184.2	1182.	49.
24.....	581.6	583.	584.1	807.	807.7	808.5	1169.1	1170.3	1178.2	52.9
26.....	583.6	585.	583.	916.	917.	916.2	1207.1	1203.1	1204.	56.
27.....	585.2	585.2	585.1	926.2	926.	925.5	1209.	1208.4	1210.	56.2
28.....	583.5	584.	583.6	819.6	819.6	819.5	1161.3	1163.9	1165.	50.
29.....	586.9	586.4	586.4	850.	850.2	849.9	1182.1	1183.	1181.3	51.
30.....	586.1	587.7	589.5	806.5	807.9	808.9	1176.6	1172.1	1168.	49.

MAY.]

DECLINATION MAGNETOMETER.

[1841.]

Göttingen time... Observatory time	h. m.												Means.	* Reduced means.
	6 00	8 00	10 00	12 00	14 00	16 00	18 00	20 00	22 00	0 00	2 00	4 00		
27 May 1.....	576.	583.	571.2	583.1	588.2	581.2	570.4	567.	576.	580.	578.9	568.4	578.2	465.4
3.....	576.7	579.7	582.2	586.6	593.3	580.6	569.7	571.1	577.2	579.	577.1	576.9	579.5	466.7
4.....	579.	581.5	583.1	586.2	589.7	576.	561.3	569.6	576.5	581.8	580.8	580.2	578.4	465.6
5.....	579.5	581.3	583.	586.9	594.1	582.	570.8	584.	.....	579.	579.1	583.7	582.5	469.8
6.....	579.4	582.9	571.1	586.	595.4	581.5	569.9	567.2	573.	579.8	572.	584.8	577.6	464.8
7.....	578.5	579.1	581.5	589.8	590.	579.8	569.1	566.	573.	578.2	584.7	579.3	579.1	464.3
8.....	578.4	577.3	581.9	586.3	587.	576.1	565.2	565.	572.	575.	584.6	580.8	577.5	464.7
10.....	581.6	580.2	578.2	586.1	582.9	574.8	572.	568.	569.6	578.	585.9	571.9	578.	463.2
11.....	574.	578.2	580.3	587.3	593.	583.	578.5	567.8	569.1	576.9	575.9	579.1	578.5	465.7
12.....	582.3	580.1	584.7	581.8	591.5	578.8	569.8	566.2	573.2	576.5	578.	586.4	579.1	466.3
13.....	582.8	585.	579.8	586.8	584.7	578.2	570.5	569.4	575.4	577.2	579.6	579.9	579.1	464.3
14.....	582.	579.4	580.3	585.1	583.8	577.8	573.	577.2	576.3	579.	594.7	586.4	581.2	468.4
15.....	583.5	580.	582.9	586.9	585.1	571.9	565.5	567.	576.8	578.	577.	575.6	577.5	464.7
17.....	584.	576.1	576.6	576.6	571.5	571.7	561.8	568.	580.3	578.8	576.9	577.6	575.	463.2
18.....	579.	582.1	588.9	581.6	585.4	576.2	568.4	566.5	567.9	572.6	573.2	575.3	576.4	463.6
19.....	577.4	579.5	581.6	590.	584.9	580.9	568.2	567.6	576.8	576.	601.	569.4	581.	468.2
20.....	579.	579.4	585.7	586.5	594.	583.8	570.8	563.8	571.6	579.1	579.5	583.	579.8	467.
21.....	580.	570.5	585.4	583.2	593.2	589.5	571.9	564.6	570.7	571.8	587.	588.9	579.3	466.5
22.....	586.	576.	578.4	589.2	584.9	581.2	578.2	571.8	572.4	578.2	583.2	580.1	580.1	467.3
23.....	574.9	577.8	581.8	587.5	589.9	579.	566.1	565.2	572.4	.....	576.9	580.	577.4	464.6
25.....	579.7	582.4	583.6	593.2	594.1	585.9	574.7	569.	578.1	578.3	580.2	579.4	581.1	468.3
26.....	584.	583.7	584.1	586.7	587.	576.6	569.6	566.9	574.9	574.9	584.7	587.2	578.8	466.
27.....	583.6	573.4	591.	583.1	580.	574.3	571.5	574.5	576.3	578.2	584.7	.....	580.1	467.3
28.....	572.3	581.4	578.7	588.9	586.	576.4	568.8	572.7	571.1	578.6	578.6	575.7	577.4	464.6
29.....	575.9	578.4	581.	584.7	576.2	568.4	569.7	571.5	576.1	576.8	570.5	576.2	575.4	462.6
31.....	†575.8	576.9	580.	588.9	588.3	568.7	568.7	564.5	573.6	577.7	573.4	575.7	575.1	463.3
Means.....	580.	580.5	581.4	588.	586.6	578.2	569.4	567.8	573.	577.4	579.6	581.7	578.63	
* Reduced means	467.2	467.7	468.6	475.2	473.8	465.4	456.6	455.	460.2	464.6	466.8	468.9		465.89

* Reduced to previous position; correction, —112.8.

† One minute late.

MAY.]

VERTICAL FORCE MAGNETOMETER.

[1841.]

[97]

210

Observing time. Observatory time	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.	Reduced to 32° F.
May 1.....	918.5	804.1	799.7	797.8	794.9	804.7	830.6	824.	878.2	868.8	867.8	857.9	827.9	575.5
3.....	*768.8	741.7	714.2	694.5	692.7	700.8	718.	.....	783.7	796.4	799.3	785.9	745.1	576.4
4.....	767.8	752.4	788.9	727.6	731.8	748.5	761.4	780.8	805.	831.	840.	835.5	776.6	572.8
5.....	825.8	809.1	788.2	773.6	774.1	796.4	833.7	846.2	856.7	850.9	859.1	849.9	831.3	578.7
6.....	836.1	832.9	838.5	839.8	833.1	850.7	872.5	860.7	937.6	934.5	+931.1	916.	872.8	578.5
7.....	896.7	876.6	857.	837.1	834.8	848.6	893.6	909.5	923.7	932.1	936.4	928.6	889.6	584.5
8.....	919.8	902.9	883.	863.5	850.8	857.	860.5	867.7	871.8	885.9	896.7	896.	879.8	586.7
10.....	972.5	984.4	+1036.3	967.8	918.8	900.4	891.4	882.8	901.	908.5	931.	946.1	935.9	598.4
11.....	957.3	962.1	957.8	948.7	945.	950.7	958.5	972.1	988.9	1007.2	1018.	1011.9	973.2	592.5
12.....	1000.	982.3	963.7	949.5	943.	938.5	938.	936.1	938.2	942.9	947.	944.1	951.4	597.7
13.....	939.6	923.8	894.9	879.4	875.9	887.9	900.2	917.3	936.7	957.8	961.8	955.1	919.2	588.5
14.....	947.1	927.9	898.9	877.8	869.6	870.4	876.5	866.9	899.7	919.7	938.2	938.8	904.3	587.1
15.....	932.3	908.5	885.5	866.6	863.	877.8	895.	914.7	934.3	954.9	961.8	951.4	912.2	588.2
17.....	958.5	943.2	936.6	922.8	915.5	928.3	944.9	959.	978.2	1011.	1028.1	1023.2	963.4	596.6
18.....	1004.6	985.6	964.7	944.1	937.7	936.4	944.6	949.	961.8	982.5	1001.2	1003.2	968.	595.4
19.....	989.1	971.7	949.	930.3	928.8	940.7	957.2	975.8	991.7	998.9	1014.3	1000.8	970.6	600.7
20.....	976.3	955.2	932.1	914.5	907.3	919.1	933.3	956.7	988.1	1023.	1043.9	1039.	965.7	595.8
21.....	1029.3	1015.5	996.9	974.6	972.4	987.1	1010.1	1046.5	1088.8	1125.1	1155.8	1165.4	1047.3	614.
23.....	1134.9	1123.2	1101.8	1082.6	1083.	1092.8	1128.5	1165.5	.....	.....	.....	.....	1114.	617.3
Means.....	930.3	916.	901.9	883.3	877.4	885.9	900.7	925.	925.7	940.6	951.7	947.1	916.6	
Reduced to 32° F.	600.9	601.5	603.6	595.8	587.2	582.2	576.7	570.	574.7	582.9	589.4	608.3		590.5

See general notes. * One minute late. † Two minutes late. ‡ Recorded 1136.3, but at 4h. 41m. needle was at 1008.6. § One minute late.

Mar.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

[1841.]

	<i>h. m.</i> 5 57½ 0 17	<i>h. m.</i> 7 57½ 2 17	<i>h. m.</i> 9 57½ 4 17	<i>h. m.</i> 11 57½ 6 17	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 15 57½ 10 17	<i>h. m.</i> 17 57½ 12 17	<i>h. m.</i> 19 57½ 14 17	<i>h. m.</i> 21 57½ 16 17	<i>h. m.</i> 23 57½ 18 17	<i>h. m.</i> 1 57½ 20 17	<i>h. m.</i> 3 57½ 22 17	Means.
Göttingen time.....	49.8	49.	48.7	48.3	48.6	49.5	50.4	51.5	53.4	54.9	52.6	51.5	50.7
Observatory time.....	45.7	43.8	42.	41.	41.1	43.	43.2	....	47.9	48.4	47.6	46.2	44.5
May 1.....	45.8	44.8	43.9	43.1	44.1	45.	47.	48.7	51.3	51.2	51.	49.8	47.1
3.....	49.8	48.3	47.	46.1	47.2	49.3	51.2	52.7	53.	52.	51.3	51.	49.9
4.....	51.1	50.9	50.4	50.1	51.2	52.5	54.2	56.7	58.9	57.9	57.	55.1	53.8
5.....	54.3	53.	51.9	51.	52.	53.6	55.3	56.7	57.5	57.	56.8	56.	54.6
6.....	55.9	54.4	53.2	52.3	52.	52.	53.6	53.3	53.3	55.5	55.3	55.	53.7
7.....	58.3	57.2	56.2	55.	55.	55.3	56.	57.	57.3	57.9	56.4	58.9	57.
8.....	60.	59.8	58.8	58.1	58.	58.7	59.5	61.	62.	62.7	62.	61.2	60.2
9.....	61.	59.8	58.8	57.9	57.	57.	57.5	58.	58.4	58.	57.8	57.	56.2
10.....	56.7	55.7	54.5	53.9	53.6	55.	56.3	58.	59.2	59.1	58.7	57.8	56.5
11.....	57.2	56.	54.3	53.3	53.	53.	54.2	56.	57.	57.6	57.6	56.9	55.5
12.....	56.4	55.	53.5	52.4	53.	54.	56.	57.5	58.5	59.	59.	57.5	56.
13.....	58.	57.	56.	55.2	55.2	57.	58.9	61.2	62.	62.5	63.3	62.	59.1
14.....	61.2	59.8	58.1	57.	57.	58.	59.	60.	61.3	62.	61.7	60.6	59.6
15.....	60.1	59.	57.4	56.2	57.	58.	59.8	61.2	61.8	61.8	61.	59.8	59.4
16.....	59.	57.7	56.	55.	55.3	56.2	58.5	60.7	63.	64.3	64.	63.1	59.4
17.....	62.7	61.	59.9	59.	59.5	61.	64.2	66.	67.6	69.5	70.	69.	64.1
18.....	68.9	68.1	67.	66.1	66.7	68.2	71.	74.	....	....	....	....	68.8
Means.....	56.4	55.3	54.1	53.3	53.5	54.5	56.	58.3	58.	58.5	58.1	57.1	56.2

Degrees Fahrenheit.

[1841.

HORIZONTAL FORCE MAGNETOMETER.

May.]

Gettysen time... Observatory time	h. m. 6 02½ 0 22	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 24 02½ 18 22	h. m. 26 02½ 20 22	h. m. 28 02½ 22 22	Means.	Reduced to 32° F.
May 1.....	1123.9	1132.9	1150.3	1130.9	1147.2	1199.1	1171.	1164.5	1134.6	1158.7	1168.2	1161.5	1153.6	1099.4
3.....	1126.1	1130.	1112.9	1196.8	1128.2	1150.6	1138.9	1122.6	1114.5	1118.5	1121.8	1123.3	1115.3	1080.8
4.....	1120.2	1113.7	1123.2	1109.1	1135.8	1162.3	1174.2	1146.5	1141.7	1179.	1162.7	1161.3	1144.1	1100.9
5.....	1153.3	1145.3	1132.4	1120.9	1147.3	1174.6	1190.9	1159.	1147.4	1164.1	1193.8	1193.6	1160.2	1108.3
6.....	1174.9	1162.4	1173.2	1164.6	1204.4	1245.	1245.	1223.5	1193.3	1195.8	1210.1	1215.9	1200.7	1137.2
7.....	1195.5	1192.7	1191.8	1166.7	1184.6	1201.5	1215.	1187.9	1186.9	1179.9	1157.1	1188.9	1186.5	1120.7
8.....	1180.4	1172.	1159.9	1156.8	1179.9	1208.2	1188.2	1165.7	1164.7	1169.1	1239.4	1178.	1179.3	1116.4
10.....	1273.2	1322.6	1396.8	1276.2	1292.	1316.2	1231.1	1137.9	1156.8	1213.4	1208.2	1237.1	1255.1	1182.6
11.....	1237.1	1233.1	1225.9	1196.7	1203.5	1240.	1233.	1209.	1190.2	1211.	1199.3	1197.6	1214.	1131.1
12.....	1209.6	1208.8	1184.7	1174.9	1166.3	1199.9	1220.6	1219.3	1212.1	1188.4	1200.9	1192.3	1197.3	1121.6
13.....	1158.3	1188.8	1188.3	1177.	1202.4	1220.2	1191.7	1202.	1185.1	1190.7	1198.3	1199.4	1191.8	1121.
14.....	1189.8	1187.9	1179.4	1161.4	1198.7	1210.8	1196.6	1171.	1173.6	1179.6	1176.	1171.5	1183.2	1114.1
15.....	1220.9	1181.	1172.2	1155.	1197.7	1202.3	1202.2	1175.9	1170.1	1193.7	1173.6	1170.5	1185.	1115.1
17.....	1167.6	1170.9	1162.	1199.3	1251.8	1241.8	1234.4	1211.3	1207.6	1215.4	1205.4	1216.7	1207.	1127.
18.....	1214.7	1212.8	1207.6	1210.3	1185.9	1214.	1216.	1192.7	1166.9	1219.5	1229.2	1196.1	1206.5	1124.9
19.....	1201.1	1201.2	1195.3	1184.7	1201.1	1201.9	1196.2	1212.4	1188.4	1212.2	1192.2	1233.5	1201.8	1122.3
20.....	1204.	1205.5	1194.5	1191.9	1195.	1208.1	1198.7	1206.2	1198.7	1215.1	1205.	1236.2	1204.5	1124.8
21.....	1216.1	1198.2	1209.4	1215.2	1169.1	1209.7	1213.8	1217.4	1248.3	1244.3	1241.6	1277.	1224.1	1130.4
22.....	1247.	1254.	1245.1	1231.7	1287.9	1260.2	1249.9	1250.3	1257.1	1274.3	1272.	1262.9	1256.9	1143.5
24.....	1270.7	1252.4	1240.	1237.	1259.6	1299.4	1287.5	1250.5	1262.4	.....	1278.	1275.2	1264.8	1147.1
25.....	1274.6	1268.2	1260.4	1248.4	1248.	1287.8	1280.7	1270.8	1263.9	1266.7	1270.	1267.2	1267.2	1142.2
26.....	1253.6	1248.5	1246.1	1247.5	1252.3	1260.5	1234.3	1237.8	1243.3	1212.4	1236.2	1248.	1239.2	1124.7
27.....	1233.	1261.8	1239.7	1240.3	1257.4	1277.1	1258.8	1258.	1240.	1237.1	1224.6	.....	1248.	1141.
28.....	1299.7	1240.9	1239.5	1232.3	1242.2	1244.2	1241.3	1268.	1268.	1273.1	1280.5	1260.8	1249.5	1135.8
29.....	1254.4	1260.5	1250.6	1247.7	1271.1	1272.8	1247.4	1242.9	1251.3	1258.4	1278.	1265.3	1257.9	1136.4
31.....	1230.2	1227.9	1215.5	1196.	1225.1	1232.1	1215.4	1212.4	1204.4	1208.8	1228.2	1213.9	1217.5	1128.5
Means.....	1206.5	1206.3	1203.6	1187.4	1210.2	1228.1	1218.	1201.6	1199.3	1207.3	1212.9	1213.3	1207.77	
Reduced to 32° F.	1124.7	1127.7	1128.8	1114.6	1136.6	1151.3	1137.1	1116.3	1110.9	1115.1	1121.6	1126.		1125.85

† One minute late.

* Seven minutes late.

[1941.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

MAR.]

	h. m. 6 02½ 0 22	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	Means.
Göttingen time.....													
Observatory time.....													
May 1.....	48.7	48.	47.7	47.5	47.9	48.9	49.9	51.	59.	54.2	53.3	52.	50.7
3.....	44.8	42.8	40.8	40.	40.8	41.5	42.5	44.3	46.3	48.3	48.	46.6	43.9
4.....	45.3	44.	43.	43.	44.4	45.2	46.	48.	49.9	51.8	51.6	50.5	46.9
5.....	49.7	48.1	46.7	46.	47.3	48.	49.	53.	53.	53.3	51.8	51.	49.9
6.....	51.	50.4	50.	50.	51.8	52.5	54.	55.3	57.1	60.3	57.9	56.	53.9
7.....	54.5	52.9	51.3	54.	52.	53.	55.3	57.	58.1	57.8	57.1	56.7	54.7
8.....	55.9	54.2	53.	52.	51.5	55.	52.8	53.8	54.	.....	56.	55.	53.7
10.....	58.8	57.4	56.2	55.8	55.	55.	55.7	56.3	57.3	58.6	59.	59.4	57.
11.....	60.1	60.	59.	58.1	58.3	59.	60.	61.3	62.5	63.7	63.	61.9	60.6
12.....	61.	60.	58.4	57.3	57.	56.5	57.	58.	58.6	59.8	58.	57.	58.1
13.....	56.2	55.	53.9	53.	53.	54.4	56.	58.	59.5	60.2	59.6	58.	56.4
14.....	57.2	55.8	53.7	52.8	52.	52.7	54.5	56.	57.	58.3	58.2	57.7	55.5
15.....	56.7	55.	53.	52.1	53.	54.	55.8	57.	59.	60.	59.7	58.	56.1
17.....	58.7	57.1	56.	55.2	55.2	57.	60.	61.2	62.6	64.9	64.2	63.	59.6
18.....	61.2	59.8	57.8	56.9	57.	57.6	58.5	59.8	63.	63.	62.3	61.	59.8
19.....	60.2	59.	57.1	56.2	57.2	58.	59.5	61.	61.7	61.9	61.3	60.3	59.4
20.....	59.	57.7	56.	54.7	55.	56.	58.	60.2	63.	65.1	65.2	64.	59.5
21.....	62.9	61.1	59.8	59.	60.	61.	63.3	66.	68.	70.	70.7	70.	64.3
22.....	69.1	68.	66.9	66.	66.7	67.4	70.2	73.8	76.3	76.8	76.7	75.8	71.1
24.....	74.	71.	68.8	68.2	70.	71.	73.	75.2	78.	77.8	78.	77.	72.6
25.....	75.8	74.	72.5	71.8	72.	76.	75.2	77.	78.	77.8	76.3	74.9	75.1
26.....	73.8	72.5	71.5	71.	71.1	71.8	71.2	71.2	71.2	71.5	70.9	70.	71.5
27.....	69.7	69.7	68.7	68.	67.8	68.2	68.7	69.	69.2	69.3	69.	.....	68.9
28.....	68.5	68.	67.6	67.5	68.	69.	71.	72.8	75.3	76.2	76.	74.5	71.2
29.....	73.5	72.2	71.7	71.3	70.9	72.1	73.6	74.5	77.	78.	77.	75.	73.9
31.....	64.	62.7	60.8	60.4	60.7	61.8	63.8	66.	67.3	69.	69.	67.2	64.4
Means.....	60.4	59.1	57.8	57.1	57.5	58.5	59.9	61.4	62.5	63.8	63.5	62.1	60.25

Degrees Fahrenheit.

[1840.

TRIPLE OBSERVATIONS.

Mar.]

	Declination.			Vertical force.				Horizontal force.			
	h. m. 13 52½ 8 12	h. m. 14 00 8 19½	h. m. 14 07½ 8 27	h. m. 13 50 8 09½	h. m. 13 57½ 8 17	h. m. 14 05 8 24½	Tempera- ture Fah- renheit.	h. m. 13 55½ 8 14½	h. m. 14 02½ 8 22	h. m. 14 10 8 29½	Tempera- ture Fah- renheit.
May 1.....	591.9	593.2	592.8	794.2	794.9	794.7	48.6	1148.1	1147.2	1150.2	47.9
3.....	592.	593.3	592.8	692.5	692.7	692.6	41.1	1126.8	1128.2	1130.1	40.8
4.....	584.	583.7	582.9	731.	731.8	731.9	44.1	1133.6	1135.8	1137.6	44.4
5.....	594.	594.1	594.	774.3	774.1	774.6	47.2	1145.7	1147.7	1148.4	47.2
6.....	593.7	595.4	594.9	832.	833.1	833.8	51.2	1195.4	1204.4	1207.6	51.8
7.....	590.5	590.	589.2	835.	834.8	835.1	52.	1181.	1184.6	1185.3	52.
8.....	586.7	587.	587.	851.3	850.8	851.	52.	1177.4	1179.9	1181.7	51.5
10.....	565.2	562.9	566.9	921.	918.8	917.5	55.	1292.9	1292.	1288.	55.
11.....	592.1	592.	592.2	944.8	945.	945.6	56.	1201.1	1203.5	1207.1	56.3
12.....	588.	591.5	591.1	943.1	943.	942.9	57.	1156.9	1166.3	1169.3	57.
13.....	585.	584.7	585.	875.2	875.9	876.7	53.6	1201.8	1202.4	1204.5	53.
14.....	582.9	582.8	582.	869.4	869.6	869.4	53.	1195.	1198.7	1202.9	53.
15.....	584.8	585.1	585.	892.3	893.	893.8	53.	1190.9	1197.7	1201.3	53.
17.....	576.1	571.5	568.1	915.7	915.5	916.	55.2	1237.4	1251.8	1236.1	55.2
18.....	584.9	585.4	584.9	937.5	937.7	937.3	57.	1187.	1185.9	1188.7	57.
19.....	586.9	584.9	586.7	928.8	928.8	930.	57.	1201.1	1201.1	1209.7	57.2
20.....	594.	594.	594.1	907.2	907.3	909.	55.3	1192.3	1195.	1197.2	55.
21.....	594.	593.2	594.5	971.6	972.4	973.6	59.5	1186.9	1189.1	1193.	60.
22.....	585.	584.9	585.	1081.9	1083.	1083.	66.7	1282.5	1287.9	1286.2	66.7
23.....	590.1	589.9	589.8	.....	.....	.....	.....	1257.8	1259.6	1267.2	70.
24.....	594.1	594.1	594.9	.....	.....	.....	.....	1242.4	1249.	1260.1	72.
25.....	586.9	587.	585.1	.....	.....	.....	.....	1251.	1252.2	1253.7	71.1
26.....	579.4	580.	581.3	.....	.....	.....	.....	1257.3	1267.4	1267.6	67.8
28.....	586.6	586.	587.	.....	.....	.....	.....	1245.7	1250.7	1250.8	68.
29.....	.....	576.2	.....	.....	.....	.....	.....	.....	1271.1	.....	70.9
31.....	588.5	588.3	587.8	.....	.....	.....	.....	1221.6	1225.1	1227.8	60.7

	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	Means.		Reduced to 32° F.
																		Old position.	New position.	
Göttingen time.....	5 57.4	7 57.4	9 57.4	11 57.4	13 57.4	15 57.4	17 57.4	19 57.4	21 57.4	23 57.4	25 57.4	27 57.4	29 57.4	31 57.4	33 57.4	35 57.4	37 57.4	39 57.4	41 57.4	New position.
Observatory time.....	0 17	2 17	4 17	6 17	8 17	10 17	12 17	14 17	16 17	18 17	20 17	22 17	24 17	26 17	28 17	30 17	32 17	34 17	36 17	New position.
June 1.....	536.5	514.8	489.2	469.1	457.5	459.2	481.1	503.3	540.4	575.2	593.9	598.3	1047.2	518.2	590.9	61.9				
2.....	581.	567.2	545.8	534.	533.6	556.5	590.6	621.7	649.3	687.1	694.3	699.2	1134.	605.	599.4	70.4				
3.....	691.1	676.1	647.6	616.	600.2	608.9	616.8	625.1	635.2	654.2	664.1	662.4	1170.5	641.5	632.4	93.4				
4.....	640.5	608.6	568.5	536.5	530.7	538.2	555.6	584.8	620.8	649.1	667.9	669.4	1126.5	597.5	618.9	89.9				
5.....	669.2	661.5	626.7	614.5	613.2	642.1	671.4	709.1	746.9	777.8	789.	797.2	1320.5	691.9	681.9	102.9				
6.....	721.5	710.1	675.6	657.	649.2	660.8	687.5	720.1	758.8	795.1	805.6	808.6	1348.6	719.6	678.9	149.9				
7.....	784.8	778.	763.7	756.7	762.6	779.1	805.5	837.5	867.	898.2	893.5	865.9	1345.	816.	694.3	165.3				
8.....	847.4	836.5	807.	797.4	798.1	820.1	837.9	868.9	887.7	918.7	921.4	899.	1382.3	853.3	719.5	190.5				
9.....	891.2	856.6	826.9	799.9	791.5	794.	803.7	825.5	842.6	863.8	868.	851.9	1363.6	834.6	719.7	190.7				
10.....	926.1	892.7	855.	770.	764.1	777.6	791.2	820.1	868.7	899.3	896.3	868.8	1351.6	832.6	713.1	184.1				
11.....	946.6	934.	817.9	801.5	790.2	787.2	783.	785.5	789.4	785.5	781.	770.1	1326.7	797.7	719.2	190.2				
12.....	690.6	680.1	671.4	662.9	658.1	661.	668.2	691.4	716.6	755.3	731.1	724.5	1231.6	692.6	687.	158.				
13.....	711.8	701.3	694.9	690.9	686.6	688.3	690.6	693.5	695.8	708.3	702.3	698.8	1225.9	696.9	685.9	156.9				
14.....	696.9	688.5	642.	622.4	614.8	623.6	637.6	652.3	676.5	707.1	722.6	718.	1193.4	664.4	677.7	148.7				
15.....	696.9	672.7	656.5	640.1	640.8	652.	674.2	696.	725.3	753.	736.3	733.4	1218.8	689.8	685.6	156.6				
16.....	711.	696.8	684.9	670.5	662.7	655.5	635.	628.2	617.7	611.9	607.8	597.2	1177.3	648.3	633.2	154.3				
17.....	568.5	579.4	577.	573.6	577.	591.	597.2	599.3	604.6	606.7	616.2	612.3	1122.5	593.5	662.2	133.2				
18.....	684.9	676.9	667.3	656.7	645.4	650.1	653.2	653.7	657.	665.2	666.1	657.4	1190.2	661.2	675.9	146.9				
19.....	655.8	644.5	631.7	624.3	618.1	621.8	627.2	633.8	627.5	635.2	639.	646.9	1163.	632.	666.6	137.6				
20.....	653.1	651.4	648.1	649.7	653.6	674.9	712.9	747.2	771.9	810.7	817.1	807.8	1244.7	715.7	671.	142.				
21.....	807.	799.5	779.2	769.6	772.7	783.	815.4	844.8	869.9	891.4	897.1	882.9	1355.	826.	700.3	171.3				
22.....	.....	.....	830.1	810.7	800.2	796.1	804.	815.7	806.7	799.4	790.	786.1	1332.9	803.9	706.2	176.3				
23.....	771.1	768.2	762.8	757.9	759.	776.	803.2	830.2	847.4	868.	849.8	837.4	1329.9	800.9	696.8	167.8				
24.....	782.3	767.4	752.4	738.9	739.6	743.	768.9	776.8	797.8	814.5	826.4	817.5	1306.1	777.1	697.3	168.3				
25.....	812.	805.2	786.8	771.6	763.4	779.2	809.5	835.1	869.5	883.6	896.	896.	1347.4	818.4	702.1	173.1				
26.....	873.1	845.9	835.5	803.	805.3	828.	856.9	892.9	945.4	956.2	951.2	939.5	1406.7	877.7	723.3	193.3				
27.....	1241.2	1228.	1213.4	1209.3	1208.3	1219.3	1235.9	1254.9	1276.2	1296.7	1299.2	1286.	1251.6							
28.....	726.	712.2	699.	684.4	680.3	690.3	706.9	725.9	747.2	767.7	770.2	757.		723.6						
29.....	689.4	683.7	683.	674.8	673.4	669.9	663.5	663.6	666.	678.4	693.	698.			677.9					
30.....	160.4	154.7	154.	145.8	144.4	140.9	134.5	134.6	137.	149.4	164.	167.								
Means, old position.....																				
Means, new position.....																				
Red. to 32° F. old position.....																				
Red. to 32° F. new position.....																				

¹ One minute late.

² Four minutes late.

³ Three minutes late.

⁴ One minute late.

⁵ Two minutes late.

⁶ One minute late.

⁷ One minute late.

⁸ Four minutes late.

⁹ Thirty-eight minutes late, 825.1.

See general notes.

[1841.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

June.]

	A. m. 5 57½ 0 17	A. m. 7 57½ 2 17	A. m. 9 57½ 4 17	A. m. 11 57½ 6 17	A. m. 13 57½ 8 17	A. m. 15 57½ 10 17	A. m. 17 57½ 12 17	A. m. 19 57½ 14 17	A. m. 21 57½ 16 17	A. m. 23 57½ 18 17	A. m. 1 57½ 20 17	A. m. 3 57½ 22 17	Means.
Göttingen time.....													
Observatory time.....													
28 June 1.....	66.	65.	63.	63.	61.5	62.2	64.	66.5	69.2	70.6	70.6	69.6	65.8
2.....	69.	68.	66.8	66.5	67.3	69.	72.9	74.1	75.9	77.2	76.9	76.	71.6
3.....	75.5	74.4	73.	70.	70.	71.	71.5	72.	74.	77.2	76.6	76.	72.0
4.....	71.	69.	65.8	64.9	65.	66.	68.	70.9	72.9	74.1	74.	73.5	69.6
5.....	73.	72.4	71.	70.3	71.1	73.	75.5	78.	80.	81.	81.	80.5	75.6
6.....	73.	71.3	70.	69.5	69.5	71.	74.2	76.	79.	79.9	78.9	78.3	74.2
7.....	77.6	76.7	75.8	76.4	77.	78.5	80.7	82.7	85.	85.8	83.	81.	80.2
8.....	80.	79.	77.8	78.	78.	79.5	81.8	83.5	83.	85.3	84.7	82.7	81.1
9.....	82.	80.	78.	77.2	77.	77.5	79.	80.5	81.7	82.3	81.1	79.8	79.7
10.....	78.	77.	76.	75.9	75.5	76.9	79.3	81.2	84.	84.9	82.	80.6	79.3
11.....	80.	78.5	78.	77.	76.5	76.2	77.	76.9	76.9	75.5	76.	75.	77.
12.....	71.	73.	70.	69.5	68.5	69.	70.8	72.6	74.5	74.7	73.3	72.8	71.6
13.....	71.4	73.	71.5	71.	70.5	71.	72.	73.	73.9	73.9	72.3	71.5	72.
14.....	71.	69.	69.	67.	66.7	67.4	68.9	70.5	73.	73.9	73.9	72.3	70.2
15.....	71.	70.	68.9	68.	68.5	70.	71.8	73.5	73.	74.9	73.9	72.3	71.5
16.....	71.	71.3	71.	70.1	69.	69.	68.5	68.	67.3	66.9	66.	65.4	68.6
17.....	65.	65.5	65.	64.9	65.	65.5	66.3	66.5	67.	67.8	67.7	67.	66.1
18.....	71.	71.3	70.8	70.	69.	69.	69.4	70.1	70.6	70.9	69.8	69.3	70.1
19.....	69.3	69.	68.	68.	67.3	67.8	68.	69.3	68.9	69.6	69.9	69.9	68.7
20.....	70.1	70.	70.	70.1	70.3	72.1	75.4	77.	79.	81.	80.	79.	74.5
21.....	78.2	77.9	76.9	76.4	77.	78.5	81.	83.	84.5	85.6	83.9	82.9	80.5
22.....	.....	.....	79.	78.9	78.	78.	78.	79.8	78.9	78.7	77.7	76.8	78.5
23.....	76.8	76.9	76.7	76.	76.7	78.	79.4	81.	82.6	82.	80.9	80.	78.9
24.....	76.9	76.1	75.	74.8	74.3	75.	76.4	78.	79.7	80.3	80.	78.6	77.1
25.....	77.2	77.3	76.3	78.	76.	77.5	80.3	82.	83.7	84.5	83.9	....	79.8
26.....	81.2	80.1	78.9	78.	79.	81.	83.	85.8	87.2	87.3	86.	84.9	82.7
27.....													
28.....													
29.....													
30.....													
Means.....	73.9	73.3	73.4	71.9	71.7	72.7	74.4	75.8	77.3	77.8	76.9	76.7	74.5

Degrees Fahrenheit

[1841.]

HORIZONTAL FORCE MAGNETOMETER.

[JUNE.]

	h. m.				h. m.				h. m.				h. m.				h. m.				Means.		Reduced to 32° F.	
	6 02½	8 02½	10 02½	12 02½	2 22	4 22	6 22	8 22	10 22½	12 02½	14 02½	16 02½	18 02½	20 02½	22 02½	0 02½	2 02½	4 02½	h. m.	h. m.	Old position.	New position.	Old position.	New position.
Göttingen time.	0 22	2 22	4 22	6 22																				
Observatory time.																								
June 1.	1245.1	1237.5	1225.5	1208.9	1118.6	1132.6	1109.1	1141.9	1051.8	1093.9	1100.7	1081.7	1287.6	387.6	1189.9	289.9								
2.	1081.	1091.4	1074.9	1063.4	1076.4	1107.2	1018.3	1103.4	1225.2	1252.9	1190.9	1298.5	1345.	445.	1229.	329.								
3.	1265.	1271.9	1252.6	1240.5	1253.3	1259.6	1217.5	1231.7	1228.6	1268.0	1286.7	1257.5	1467.4	567.4	1350.2	450.2								
4.	1279.5	1255.6	1267.4	1213.4	1253.4	1288.6	1255.7	1250.4	1277.3	1268.1	1297.8	1281.3	1473.5	573.5	1365.	465.								
5.	1281.4	1280.	1269.6	1239.3	1255.5	1284.3	1287.4	1282.7	1267.1	1309.5	1318.6	1305.0	1494.7	594.7	1367.7	467.7								
9.	393.4	382.9	393.4	380.4	374.6	399.2	421.8	421.8	438.4	441.3	435.9	430.3	1309.5	409.5	1166.5	266.5								
10.	418.4	423.4	416.2	405.	427.5	425.6	405.	412.1	413.6	407.3	432.4	420.7	1317.4	417.4	1179.1	279.1								
11.	410.5	410.4	408.2	387.8	404.7	398.2	391.3	387.7	415.5	425.6	422.1	428.6	1367.5	407.5	1173.8	273.8								
12.	421.2	415.1	412.3	406.1	426.5	418.7	395.2	402.3	412.3	392.6	394.1	399.4	1368.	408.	1178.7	278.7								
14.	393.	395.8	395.1	400.	409.4	399.4	376.8	369.3	373.4	395.5	394.9	396.4	1391.6	391.6	1178.8	278.8								
15.	390.	398.4	397.1	387.3	412.	440.3	402.1	374.3	392.8	417.	439.6	423.3	1306.2	406.2	1189.	289.								
16.	407.1	396.3	390.4	386.5	397.6	410.3	401.9	383.1	387.8	400.9	404.3	401.1	1297.3	397.3	1187.7	287.7								
17.	398.8	391.6	398.7	384.7	400.5	404.7	398.5	384.	406.2	421.1	406.	454.2	1304.1	404.1	1190.1	290.1								
18.	401.	394.8	408.	407.	432.4	460.	410.9	385.1	372.7	381.8	392.4	393.9	1303.3	403.3	1198.	298.								
19.	391.4	381.8	388.2	393.	410.9	398.2	391.7	380.	381.7	397.1	393.3	394.	1292.	392.	1194.3	294.3								
21.	412.3	410.9	402.	396.8	412.1	414.2	356.9	366.8	380.2	390.4	389.	390.4	1293.5	393.5	1181.6	281.6								
22.	398.6	399.1	400.2	385.7	401.5	409.	402.8	357.1	398.9	392.4	423.6	400.1	1297.4	397.4	1192.4	292.4								
23.	399.	383.7	386.9	379.4	398.6	416.8	406.7	404.7	413.5	439.7	444.	427.9	1308.4	408.4	1184.9	284.9								
24.	437.1	414.7	413.3	407.6	416.3	457.3	445.1	438.3	438.3	438.7	458.	442.3	1333.9	433.9	1192.1	292.1								
25.	.....	.....	.....	365.7	381.9	408.3	427.4	455.8	375.8	401.7	419.2	403.4	1307.4	407.7	1174.3	274.3								
26.	407.3	407.8	425.8	416.7	420.2	431.	421.7	414.3	420.	440.	440.3	431.7	1323.1	423.1	1187.7	287.7								
28.	412.3	411.1	406.1	405.	411.	427.9	393.2	381.8	411.7	417.2	434.6	438.7	1312.5	423.1	1181.7	281.7								
29.	425.	424.	431.4	413.3	427.4	433.5	437.1	470.4	434.9	471.	.....	.....	1336.8	436.8	1198.5	298.5								
30.	456.2	446.6	454.5	440.7	454.5	460.1	468.3	442.7	457.7	457.8	466.6	464.2	1355.8	455.8	1211.1	311.1								
Means, old position.	1331.2	1325.2	1322.	1311.8	1334.2	1343.8	1335.3	1323.6	1332.3	1341.2	1350.9	1349.1	1332.3											
Means, new position.	431.2	425.2	422.	411.8	432.2	443.8	425.3	423.6	432.3	441.2	450.9	449.1		432.3										
Red. to 32° F. old position	1209.4	1207.5	1206.6	1200.3	1219.5	1227.5	1204.4	1198.9	1201.8	1208.1	1220.4	1222.4			1210.1									
Red. to 32° F. new position	309.4	307.5	306.6	300.8	319.5	327.5	304.4	298.9	301.8	308.1	320.4	322.4												

NOTE.—The means are reduced to readings in both the old and new positions of the magnetometer bar.

June.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

[1841.

	<i>h. m.</i> 0 02½	<i>h. m.</i> 8 02½	<i>h. m.</i> 10 02½	<i>h. m.</i> 12 02½	<i>h. m.</i> 13 02½	<i>h. m.</i> 14 02½	<i>h. m.</i> 16 02½	<i>h. m.</i> 18 02½	<i>h. m.</i> 20 02½	<i>h. m.</i> 22 02½	<i>h. m.</i> 0 02½	<i>h. m.</i> 2 02½	<i>h. m.</i> 4 02½	Means.
Göttingen time	0 02½	8 02½	10 02½	12 02½	13 02½	14 02½	16 02½	18 02½	20 02½	22 02½	0 02½	2 02½	4 02½	
Observatory time	0 02½	8 02½	10 02½	12 02½	13 02½	14 02½	16 02½	18 02½	20 02½	22 02½	0 02½	2 02½	4 02½	
June 1.....	65.8	64.	62.4	61.6	61.	61.	62.	63.3	66.	69.3	71.5	71.7	70.3	65.7
2.....	69.3	68.	66.5	66.	67.3	67.3	69.	72.2	74.	77.5	78.6	78.8	77.	72.
3.....	76.	74.	71.8	69.8	69.5	69.5	70.5	70.5	71.7	73.8	75.	75.2	73.	72.4
4.....	71.	69.6	65.5	64.2	64.4	64.4	65.3	67.	69.4	72.8	75.	75.	74.	69.4
5.....	72.6	72.	70.5	70.	70.8	70.8	72.5	75.4	78.3	81.2	82.2	82.3	81.5	75.8
6.....	79.8	78.3	77.2	77.	77.6	77.6	78.9	81.3	83.7	85.9	87.	88.	83.2	81.3
7.....	81.5	80.	77.5	76.8	76.8	76.8	77.	78.5	80.2	82.	83.7	82.	80.1	79.7
8.....	77.6	77.	76.	75.5	75.5	75.5	76.4	78.6	81.	85.	85.7	82.9	80.8	78.1
9.....	81.3	78.4	78.	76.8	76.	76.	75.5	76.	76.5	76.2	76.	75.	74.	76.6
10.....	73.	69.	69.	68.	68.	68.	68.5	70.2	72.3	74.1	74.7	73.2	72.2	70.9
11.....	77.2	73.5	72.	70.	70.	70.	70.5	71.3	73.5	73.9	73.9	72.6	71.4	72.4
12.....	70.4	69.5	67.	66.2	66.2	66.2	66.9	68.1	69.8	72.	74.1	74.1	73.	69.8
13.....	71.7	69.	69.	67.5	68.5	68.5	69.8	71.4	73.2	75.	75.3	74.	73.	71.3
14.....	72.3	71.	70.	69.9	68.5	68.5	68.	67.8	67.6	67.	66.5	66.7	65.	68.9
15.....	64.6	64.5	64.3	64.8	64.5	64.5	65.	66.	66.6	67.	67.5	67.4	66.8	65.7
16.....	71.9	69.7	69.7	69.2	68.6	68.6	68.2	69.3	70.3	71.	70.2	69.8	69.8	69.9
17.....	68.3	68.	68.3	67.1	67.	67.	67.	67.5	68.	68.9	69.2	69.8	69.7	68.2
18.....	69.3	69.4	69.4	69.7	70.	70.	71.8	75.8	77.6	80.2	81.6	80.7	79.6	74.6
19.....	78.3	77.8	76.5	76.3	77.	77.	79.	81.1	83.6	85.8	87.8	84.9	82.9	80.9
20.....	.....	.....	78.6	77.8	77.	77.	77.5	78.8	79.	78.8	78.7	77.3	76.6	78.
21.....	76.5	76.1	76.	76.	76.	76.	78.	79.8	81.	82.3	81.8	80.9	80.	78.7
22.....	76.1	75.3	74.2	74.	74.	74.	75.	76.8	78.1	81.	81.3	80.1	79.	77.1
23.....	78.	77.	76.1	75.	76.	76.	77.2	80.	83.	85.	85.	84.5	83.	79.7
24.....	81.	79.8	78.	77.8	79.	79.	81.	83.6	.....	82.3	87.9	86.1	84.9	81.9
Means	74.0	73.6	71.8	70.8	71.2	71.2	72.1	73.7	75.	77.	77.9	77.	75.7	74.1

Degrees Fahrenheit.

[1841.]

TRIPLE OBSERVATIONS.

June.]

	Declination.			Vertical force.				Horizontal force.				Tempera- ture Fahr- renheit.
	<i>h. m.</i> 13 53½ 8 13	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 07½ 8 27	<i>h. m.</i> 13 50 8 09½	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 14 05 8 24½	Tempera- ture Fahr- renheit.	<i>h. m.</i> 13 55 8 14½	<i>h. m.</i> 14 02½ 8 22	<i>h. m.</i> 14 10 8 29½		
Göttingen time.....	588.4	587.1	586.9	458.	457.5	457.3	61.5	.....	1118.6	.....	61.
Observatory time.....	584.6	583.	583.8	.....	533.6	534.4	67.2	.....	1076.4	.....	67.3
June 1.....	576.8	576.	576.	600.2	600.2	600.3	70.	.....	1253.0	.....	69.5
2.....	587.8	586.9	585.6	530.7	530.7	530.6	65.	.....	1253.4	.....	64.4
3.....	579.3	579.4	578.3	612.3	612.3	614.	71.	.....	1256.5	.....	70.8
4.....	585.5	586.1	586.7	649.4	649.2	649.9	69.5	.....	.....	.....	.....
5.....	581.8	579.1	577.8	.....	762.6	763.3	77.	.....	.....	.....	.....
6.....	583.9	582.	581.4	797.5	798.1	799.3	78.	366.4	374.6	373.8	77.6	
7.....	582.3	583.5	581.6	791.	791.5	791.2	77.	426.4	427.5	427.5	76.8	
8.....	585.6	585.	584.	761.9	764.1	764.	75.5	404.	404.7	405.8	75.5	
9.....	582.8	581.8	580.5	792.	790.2	790.4	76.5	426.3	426.5	427.7	76.	
10.....	579.2	578.4	578.	657.6	658.1	657.8	68.5	408.1	409.4	407.4	68.	
11.....	585.7	585.8	584.2	686.7	686.6	685.6	70.5	411.3	412.	416.3	70.	
12.....	583.6	583.1	586.6	614.7	614.8	615.8	66.7	392.3	397.6	406.2	66.2	
13.....	583.	583.6	583.5	640.3	640.8	640.	68.5	398.4	400.5	398.2	68.	
14.....	575.6	578.9	577.2	662.3	662.7	658.5	69.	425.7	432.4	434.8	68.5	
15.....	578.	578.	577.7	646.	645.4	644.9	65.	408.4	410.9	410.7	64.5	
16.....	587.2	587.2	585.6	646.	645.4	644.9	69.	409.	412.1	417.	68.6	
17.....	586.8	586.	586.	618.3	618.1	617.	67.3	402.	401.5	406.	67.	
18.....	588.	.....	.....	663.2	663.5	663.8	70.3	394.9	398.6	398.3	70.
19.....	.....	.....	.....	.....	772.7	.....	77.	.....	416.3	.....	77.
20.....	588.4	589.1	587.4	800.	800.2	799.9	78.	429.8	437.4	431.2	77.	
21.....	577.7	578.	576.1	768.5	759.	759.4	76.7	417.	420.2	422.2	76.3	
22.....	579.4	580.4	580.3	739.4	739.6	740.	74.3	416.3	411.	410.9	74.4	
23.....	584.5	583.5	583.6	763.9	763.4	763.7	76.	426.8	427.4	432.8	76.	
24.....	585.	582.8	582.3	802.8	805.3	805.7	79.	453.	454.5	458.7	79.	

MAGNETIC OBSERVATORY

AT THE

GIRARD COLLEGE, PHILADELPHIA.

ORDINARY MAGNETIC AND TRIPLE OBSERVATIONS,

FROM JULY TO DECEMBER, 1841.

GENERAL NOTE.

The instruments during this half year were as in June, 1841. The bar of the vertical force magnetometer became more steady in its magnetism.

[1841.]

DECLINATION MAGNETOMETER.

JULY.]

	<i>h. m.</i> 6 00 0 19½	<i>h. m.</i> 8 00 2 19½	<i>h. m.</i> 10 00 4 19½	<i>h. m.</i> 12 00 6 19½	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 16 00 10 19½	<i>h. m.</i> 18 00 12 19½	<i>h. m.</i> 20 00 14 19½	<i>h. m.</i> 22 00 16 19½	<i>h. m.</i> 0 00 18 19½	<i>h. m.</i> 2 00 20 19½	<i>h. m.</i> 4 00 22 19½	Means.
Getting time.....													
Observatory time.....													
July 1.....	568.7	569.7	566.8	580.	582.	575.	559.	551.	558.6	565.8	571.2	568.4	568.
2.....	567.4	568.3	570.5	580.	586.	573.1	555.5	555.5	561.4	561.	568.7	566.5	567.8
3.....	567.8	568.3	573.5	582.4	582.3	567.4	552.4	548.	558.9	566.3	568.4	563.8	566.6
5.....	580.5	583.2	566.9	577.	581.3	573.6	559.8	553.3	559.3	566.8	574.7	566.2	570.6
6.....	585.8	583.2	581.	574.	581.2	573.6	560.1	555.7	566.1	566.1	563.9	566.8	570.9
7.....	592.6	583.	571.	573.9	579.8	568.2	560.9	558.6	562.	563.	567.6	571.	569.1
8.....	567.5	566.6	568.2	577.7	580.5	568.	560.5	555.7	561.9	567.8	567.5	574.	568.2
9.....	565.8	567.	568.4	575.1	578.9	567.4	554.3	554.6	560.7	566.4	565.5	567.6	566.
10.....	575.4	568.9	571.4	577.	586.	575.	558.6	556.	560.9	564.	565.	565.1	568.6
12.....	582.4	574.3	575.2	570.7	577.6	571.	559.8	568.8	563.	564.6	568.	568.3	569.5
13.....	567.4	562.8	573.3	574.9	574.3	572.	561.7	564.3	564.3	564.4	564.5	564.1	567.1
14.....	570.7	572.5	573.9	582.1	581.1	572.6	564.2	564.2	568.2	571.4	573.	580.	572.6
15.....	570.1	577.7	565.8	578.5	577.	569.	561.	557.	566.2	567.4	567.9	567.2	568.7
16.....	570.	572.6	574.9	582.3	583.4	571.7	555.9	565.8	571.8	569.6	567.	567.5	571.
17.....	565.9	568.1	569.8	575.4	574.4	582.5	558.9	558.9	567.6	568.9	565.5	567.	567.
19.....	566.6	568.7	574.9	562.6	584.6	577.6	553.	551.	560.8	570.5	573.2	599.6	571.9
20.....	580.2	582.2	573.5	568.	580.4	574.6	562.5	563.4	559.5	570.6	573.7	571.1	571.6
21.....	572.2	565.	570.4	579.3	*589.	571.9	560.5	580.5	567.7	568.3	570.5	566.8	571.8
22.....	576.5	581.7	573.2	583.2	581.7	575.7	564.3	564.4	565.4	572.5	+570.3	.....	573.5
23.....	566.8	559.9	562.5	589.7	585.	578.	562.8	561.6	564.4	569.3	581.9	588.2	574.2
24.....	602.	577.	567.5	564.9	576.3	575.1	560.3	552.	570.6	565.	572.	583.3	572.2
26.....	569.3	574.9	576.7	581.3	582.	571.3	555.9	567.7	562.	568.6	567.1	573.9	570.1
27.....	572.9	562.7	575.1	579.2	583.3	568.5	557.5	556.1	563.5	566.8	587.6	574.7	570.7
28.....	573.	569.3	570.	577.4	582.	568.9	560.7	559.	568.1	564.9	567.6	569.3	568.3
29.....	576.3	570.5	573.	577.1	579.2	568.4	554.9	553.1	565.5	565.3	570.8	569.5	568.
30.....	567.2	568.4	571.9	578.4	579.	567.9	558.4	558.4	560.6	569.	568.	569.	568.4
31.....	570.1	571.3	574.5	580.9	583.7	568.4	554.3	556.	565.5	570.6	567.7	568.1	569.3
Means	573.7	570.4	572.4	577.9	581.2	571.5	558.9	557.3	563.	567.2	570.	573.	569.7

* Eleven minutes late.

† Twelve minutes late.

Göttingen time. Observatory time	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.	Corrected means.
July 1.....	917.4	893.2	866.9	849.	847.4	864.4	880.1	916.7	952.8	946.8	926.2	898.1	896.6	204.1
2.....	876.	843.8	823.6	807.6	802.1	804.	818.1	824.5	820.6	821.7	827.	797.	822.2	195.8
3.....	767.7	737.8	720.	700.	688.1	699.4	721.3	729.5	743.4	762.3	774.2	750.5	732.8	180.7
5.....	741.	714.	695.	679.5	678.	697.4	736.	777.	843.4	862.4	850.8	849.	760.3	181.2
6.....	825.4	826.4	764.6	764.9	766.5	773.9	792.2	823.3	868.3	887.1	890.2	863.9	821.4	197.7
8.....	890.8	867.5	843.5	822.4	813.	805.4	813.7	826.2	828.4	821.6	807.6	766.2	827.2	202.2
7.....	771.6	756.7	735.7	715.5	706.4	708.4	720.5	*731.6	*751.9	*768.6	*776.6	*782.9	742.2	173.9
9.....	*740.7	*717.6	*699.7	*687.8	*687.	*703.3	*729.4	*760.6	*786.3	*812.9	*808.9	*786.7	743.2	173.5
10.....	*773.3	*766.8	*746.8	*740.1	*742.	*749.	*768.	*792.	*827.1	*835.	*828.9	*815.5	781.2	184.5
12.....	*748.2	*721.8	*706.3	*691.7	*687.6	*705.1	*718.9	*723.2	*765.5	*791.7	*801.5	*785.9	736.	178.5
13.....	772.8	755.	733.3	723.1	721.6	745.	789.5	831.	862.5	893.2	889.	876.8	801.1	182.8
14.....	858.5	840.9	826.1	815.4	810.3	829.4	860.1	879.6	905.	915.1	903.3	891.7	861.3	195.8
15.....	886.2	867.7	853.1	843.	845.8	860.5	885.3	902.	939.8	947.4	944.1	925.2	891.7	203.2
16.....	905.	881.1	862.3	838.7	831.4	817.7	830.6	842.2	846.6	854.9	856.3	840.4	848.5	204.6
17.....	820.4	779.6	751.6	724.4	719.	730.1	748.3	766.7	842.7	847.4	839.1	820.1	782.4	188.4
19.....	801.5	776.5	751.7	734.	734.6	749.6	776.8	805.	832.7	863.8	856.7	850.3	794.4	185.6
20.....	825.2	812.6	771.8	770.	768.5	764.8	806.4	844.2	866.8	896.6	902.5	873.	824.3	192.5
21.....	838.1	808.3	781.6	760.	*757.9	777.7	801.5	831.3	857.1	874.9	866.2	857.	817.6	200.7
22.....	835.4	813.	801.8	777.2	784.2	809.	841.5	880.	905.3	926.	*919.5	....	844.8	204.9
23.....	905.5	896.1	886.6	842.4	829.5	846.8	880.7	900.7	989.1	966.6	978.5	961.	898.8	210.3
24.....	944.	923.5	911.	899.	895.	894.	915.8	924.6	968.4	993.2	991.9	983.1	937.	231.5
26.....	930.3	911.9	895.5	874.4	860.	849.7	848.4	849.9	888.9	975.9	860.4	832.8	873.2	233.5
27.....	813.1	781.5	751.6	725.7	719.	722.6	747.1	779.1	802.2	826.5	831.6	837.3	777.3	200.9
28.....	811.	788.4	778.4	767.1	764.3	777.4	807.4	830.3	855.1	866.3	857.1	838.9	811.8	204.3
29.....	817.4	788.9	752.7	729.1	720.	724.8	742.	757.1	786.	805.1	806.8	794.8	768.7	200.4
30.....	775.4	755.8	740.	721.1	715.7	735.	769.3	790.6	796.9	795.4	785.2	771.2	762.6	194.3
31.....	757.2	751.	738.8	728.2	725.8	735.	723.3	718.7	713.	706.	693.3	681.2	731.8	190.
Means.....	827.7	806.3	764.4	767.6	763.2	772.9	795.2	816.4	842.8	857.9	854.5	836.2	810.3	
Corrected means	213.5	211.	202.6	192.5	187.1	180.3	175.6	175.8	166.7	195.1	211.9	215.2		195.4

* Ten seconds late.

† One minute late.

‡ Twelve minutes late.

§ Thirteen minutes late.

Göttingen time... Observatory time	h. m. 6 02½ 0 32	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	Means.	Reduced to 32° F.
July 1.....	458.9	457.2	442.8	445.6	454.3	470.5	487.2	479.3	456.2	445.	494.4	473.5	463.	315.4
2.....	453.	451.8	444.2	433.4	445.4	451.4	461.2	419.3	411.6	432.5	436.2	432.4	439.4	306.
3.....	413.2	408.7	414.1	407.3	421.8	441.8	439.1	439.1	407.5	426.1	430.2	421.2	422.2	305.6
5.....	405.7	414.3	400.5	409.	411.4	452.8	438.1	430.9	436.4	449.	482.1	447.1	431.4	307.3
6.....	483.1	414.2	427.3	462.	409.5	443.5	445.	425.9	434.2	417.3	489.6	447.2	438.2	303.4
7.....	470.6	473.1	456.3	448.	442.6	463.3	470.9	449.8	435.9	444.1	446.5	440.7	438.6	320.2
8.....	442.9	433.8	435.	430.3	437.4	457.5	460.8	438.5	420.5	428.7	437.3	434.6	438.6	318.8
9.....	432.5	424.3	419.3	413.6	441.9	466.8	446.6	436.6	431.2	435.1	440.8	434.6	434.4	312.6
10.....	429.1	426.7	428.5	420.	426.	447.3	437.8	431.	415.9	451.1	448.9	436.7	433.2	306.9
12.....	426.7	424.8	431.3	427.	441.4	451.9	434.3	417.2	421.5	450.6	452.7	463.3	437.7	318.5
13.....	452.4	417.9	434.5	435.1	448.	451.3	456.6	445.9	474.4	481.1	492.6	477.	458.1	335.9
14.....	475.	475.4	461.	457.	466.5	482.8	464.9	443.7	475.5	478.2	518.1	525.7	477.	334.
15.....	528.9	498.1	496.9	472.	485.4	500.	491.6	490.4	490.1	494.5	503.8	493.	495.4	347.5
16.....	475.3	486.	477.7	470.	471.8	464.9	448.9	445.2	459.3	464.3	464.6	451.6	465.	328.1
17.....	453.6	447.1	442.2	440.	466.3	449.1	432.8	425.	434.5	460.	461.8	448.	445.9	320.
19.....	432.9	428.	433.1	428.	441.5	460.9	467.8	432.8	439.7	441.2	508.6	516.2	452.6	319.2
20.....	483.1	450.7	452.1	456.	478.1	476.9	519.3	478.2	533.5	487.8	485.4	459.1	481.5	345.5
21.....	460.3	453.4	462.9	454.7	497.6	499.2	481.5	454.1	480.7	494.1	479.2	467.6	471.3	340.8
22.....	500.	467.4	460.4	469.9	495.3	497.8	489.7	484.7	476.5	495.9	501.1	.....	483.5	344.9
23.....	477.1	466.1	460.7	466.4	486.	522.4	502.4	485.4	477.7	517.1	537.1	546.2	495.4	347.5
24.....	489.7	518.	474.2	523.	553.2	531.5	528.	507.6	486.	549.8	541.	532.8	519.6	365.3
26.....	505.3	506.1	495.4	502.	507.7	521.6	516.	498.1	485.5	506.6	497.7	485.6	500.6	363.1
27.....	474.6	480.1	459.7	468.3	488.5	487.9	478.3	476.	466.7	494.5	476.4	470.8	476.	363.9
28.....	496.5	481.8	481.2	479.1	486.3	496.	502.6	478.1	493.9	520.5	495.9	485.4	491.4	358.
29.....	480.9	486.1	472.4	460.4	482.3	473.4	451.4	447.8	491.2	483.9	493.2	482.	474.2	354.4
30.....	482.	479.9	480.2	474.7	491.3	491.4	482.1	483.7	490.1	487.6	470.7	482.3	482.3	361.4
31.....	473.3	468.2	473.4	466.8	466.1	500.9	478.2	450.2	446.	450.8	464.4	453.	466.7	354.2
Means.....	466.1	459.2	452.5	452.2	464.2	476.1	471.1	453.5	457.1	469.2	478.	469.4	463.9	
Reduced to 32° F.	334.9	332.5	329.5	331.7	341.5	349.7	338.9	316.	315.3	325.9	339.7	337.5		332.5

* Twelve minutes late.

July.]

TRIPLE OBSERVATIONS.

[1841.]

[97]

228

	Declination.			Vertical force.				Horizontal force.				Temperature Fahrenheit.
	h. m. 13 52½ 8 12	h. m. 14 00 8 19½	h. m. 14 07½ 8 27	h. m. 13 50* 8 09½	h. m. 13 57½ 8 17	h. m. 14 05 8 24½	Temperature Fahrenheit.	h. m. 13 55 8 14½	h. m. 14 02½ 8 22	h. m. 14 10 8 29½		
Getting time.....	582.3	582.	582.	816.1	847.4	848.6	81.3	452.5	454.3	455.1	81.9	
Observatory time.....	584.5	586.	585.8	804.8	802.1	802.	77.	445.1	445.4	445.6	76.	
July 1.....	583.7	582.3	582.2	689.1	688.1	689.1	70.	420.1	421.8	426.6	69.2	
2.....	581.7	581.3	581.8	677.4	678.	678.8	70.	409.	411.4	412.3	70.	
3.....	581.8	581.2	580.7	766.	766.5	766.	75.	416.4	409.5	416.2	75.3	
4.....	580.	579.8	582.	813.	813.3	811.4	77.	445.9	442.6	442.9	77.	
5.....	581.	580.5	580.2	706.3	706.4	707.	72.	438.3	437.4	436.9	71.	
6.....	578.6	578.9	578.7	686.9	687.	687.8	71.	439.7	441.9	443.9	71.	
7.....	578.2	577.6	577.2	687.6	687.6	687.6	73.9	425.1	426.	425.	73.4	
8.....	586.5	586.	586.	743.1	742.	742.6	69.9	436.5	441.4	436.5	69.5	
9.....	574.3	574.3	575.	810.2	810.3	810.3	72.9	448.	448.	447.4	72.	
10.....	580.6	581.1	581.5	844.9	845.8	846.0	78.	468.2	466.5	466.2	78.	
11.....	575.9	577.	577.1	821.4	815.8	817.2	80.8	493.8	495.4	493.2	80.7	
12.....	583.4	583.4	583.9	821.4	821.4	821.4	77.	471.4	471.8	471.8	76.4	
13.....	574.4	574.4	574.	719.2	719.	718.9	72.3	465.	466.3	467.6	71.7	
14.....	584.6	584.6	587.1	733.8	734.6	735.9	73.7	442.4	441.5	444.4	73.8	
15.....	575.4	580.4	579.	755.2	756.5	756.8	74.7	469.6	467.1	472.7	74.4	
16.....	589.	589.	589.	757.9	757.9	757.9	74.2	497.6	497.6	497.6	74.	
17.....	581.7	581.7	581.7	784.2	784.2	784.2	76.5	495.3	495.3	495.3	76.3	
18.....	586.1	585.	586.1	839.5	839.5	839.5	78.5	486.	486.	486.	79.	
19.....	580.	576.3	570.	896.1	895.	892.4	81.3	550.9	553.2	558.	81.3	
20.....	581.7	582.	581.1	860.7	860.	860.	79.2	504.6	507.7	513.4	79.2	
21.....	584.5	583.3	582.6	719.3	719.	719.	70.7	486.1	486.5	493.6	70.	
22.....	582.4	582.	582.3	764.4	764.3	764.6	74.2	485.5	486.3	484.4	74.	
23.....	578.7	579.2	578.8	730.	730.	730.	71.	457.6	462.3	460.2	70.	
24.....	580.3	579.	579.	715.1	715.7	715.8	71.6	488.5	491.7	491.7	71.	
25.....	582.6	583.7	583.2	735.4	735.8	735.8	71.5	483.1	486.1	486.6	71.	

* Twelve minutes late.

[1841.]

DECLINATION MAGNETOMETER.

August.]

	A. m. 8 00	A. m. 8 00	A. m. 10 00	A. m. 12 00	A. m. 14 00	A. m. 16 00	A. m. 18 00	A. m. 20 00	A. m. 22 00	A. m. 0 00	A. m. 2 00	A. m. 4 00	Means.
Göttingen time.....	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	
Observatory time	0 19½	4 19½	6 19½	8 19½	10 19½	12 19½	14 19½	16 19½	18 19½	20 19½	22 19½	24 19½	
Aug. 2.....	596.	574.7	574.8	585.	589.3	593.7	595.5	593.7	586.5	589.5	589.3	599.	574.9
3.....	581.	573.2	576.4	586.8	585.5	575.7	581.8	589.	585.8	573.4	571.7	589.8	573.2
4.....	567.1	574.6	570.	581.5	587.	578.	583.7	589.7	583.8	567.8	569.	573.7	571.2
5.....	567.8	569.8	570.	574.1	586.1	574.3	582.	586.8	581.3	560.4	571.5	581.1	569.6
6.....	581.8	584.	581.1	586.9	587.4	575.4	545.6	554.2	576.1	560.1	603.6	573.2	573.2
7.....	574.	573.1	574.3	580.	589.1	573.6	560.8	565.2	567.	568.9	568.9	568.9	571.2
8.....	567.5	567.3	566.8	578.6	577.3	581.	558.2	560.	566.	564.8	565.5	566.6	566.2
9.....	567.7	572.	576.9	590.4	580.3	569.8	560.7	561.1	565.4	564.7	565.5	566.6	569.3
10.....	567.3	569.	571.2	575.8	574.	583.3	554.4	554.4	558.8	558.8	568.7	573.	566.
11.....	573.5	582.2	583.9	583.7	583.6	566.5	561.5	563.8	564.	563.4	564.8	565.1	566.7
12.....	567.8	568.5	571.7	576.9	576.6	561.8	565.3	560.	566.	564.6	565.1	565.1	566.6
13.....	567.6	570.	570.	577.4	585.5	563.	554.8	567.8	561.7	571.	572.7	588.2	570.4
14.....	564.9	565.9	567.4	578.4	581.4	566.	554.	552.	559.8	566.8	571.6	576.5	567.8
15.....	568.1	561.3	572.5	582.9	584.8	566.9	564.7	550.	562.3	566.9	566.3	576.5	569.5
16.....	567.2	566.3	569.8	577.4	588.1	569.1	559.	569.	566.5	578.4	571.	571.	569.1
17.....	570.3	568.6	570.1	581.8	590.1	575.5	561.6	557.2	563.6	570.4	569.2	582.1	571.7
18.....	570.8	568.7	569.1	579.	584.	569.2	565.8	552.7	561.1	570.7	574.9	573.	569.
19.....	570.2	570.	570.5	578.5	584.2	569.6	557.	550.2	553.3	566.9	567.6	570.2	567.3
20.....	572.6	576.5	585.	587.4	587.	574.4	563.2	557.3	554.3	564.8	598.2	573.2	574.4
21.....	582.5	586.9	578.9	581.7	581.7	564.4	556.8	559.1	562.7	564.2	563.2	564.	567.4
22.....	565.8	566.9	570.1	573.8	579.	581.6	549.6	562.9	567.5	564.4	560.	567.	564.
23.....	566.2	570.2	572.5	577.4	579.	566.5	547.6	551.8	553.1	552.3	580.	610.	568.9
24.....	581.7	588.4	545.2	582.2	564.	567.	567.1	564.9	565.6	565.6	571.	567.4	568.
25.....	569.4	572.9	560.5	568.6	568.6	575.	560.	561.	566.	580.7	586.6	586.3	574.3
26.....	570.2	573.6	581.5	595.2	586.4	586.4	581.	583.5	566.8	568.9	567.4	567.4	573.1
27.....	561.5	569.3	569.3	589.3	585.5	566.8	556.5	560.	568.	595.9	582.2	572.	573.7
28.....	570.2	571.1	580.	582.2	589.9	567.	557.	556.9	563.2	567.6	573.1	576.4	569.96
29.....	561.5	571.1	580.	582.2	589.9	567.	557.	556.9	563.2	567.6	573.1	576.4	569.96
30.....	561.5	571.1	580.	582.2	589.9	567.	557.	556.9	563.2	567.6	573.1	576.4	569.96
31.....	561.5	571.1	580.	582.2	589.9	567.	557.	556.9	563.2	567.6	573.1	576.4	569.96
Means.....	570.8	571.1	580.	582.2	589.9	567.	557.	556.9	563.2	567.6	573.1	576.4	569.96

1 Needle out of place.

[1841.]

VERTICAL FORCE MAGNETOMETER.

Auerer.]

Göttingen time... Observatory time	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.	Reduced to 32° F.
Aug. 2.....	698.5	677.7	660.2	659.1	657.2	670.	700.4.	737.8	767.1	780.	784.3	810.5	716.8	179.5
3.....	807.3	738.1	695.6	690.3	691.8	711.9	731.	747.7	791.8	810.4	838.4	821.8	752.6	177.5
4.....	817.3	810.1	790.3	786.1	748.3	761.	784.3	809.2	836.2	867.	876.7	863.4	809.3	188.7
5.....	849.2	837.5	830.	813.6	837.5	830.7	799.7	790.6	768.3	776.9	773.	764.	800.8	193.3
6.....	746.7	733.	730.1	708.3	720.3	728.	744.	746.	747.4	774.5	827.6	786.6	749.	171.2
7.....	777.9	776.	761.9	741.	728.1	739.8	766.9	761.5	810.	834.5	848.5	841.8	783.1	186.4
8.....	803.8	791.8	782.2	778.	775.5	769.5	782.2	798.3	822.8	846.	863.	850.1	805.2	191.
9.....	838.5	830.	822.	805.6	808.9	817.	830.	838.4	840.	843.5	840.4	831.4	828.8	194.3
10.....	821.3	813.6	808.7	804.	803.4	806.	819.1	826.8	836.7	838.7	836.1	822.7	818.3	191.9
11.....	807.5	806.1	790.1	778.2	765.	769.5	781.5	793.8	806.8	805.	793.7	776.8	789.5	196.5
12.....	760.6	740.5	726.9	719.9	718.	732.7	751.	766.2	795.4	790.5	786.7	778.1	755.5	188.1
13.....	767.	755.2	740.1	727.2	720.2	733.	742.5	768.	784.8	807.	808.3	789.6	760.7	177.5
14.....	777.	753.5	727.4	706.3	698.3	705.3	726.1	751.3	762.8	781.	788.7	786.8	747.	177.3
15.....	783.3	731.2	718.7	685.9	673.	692.	721.3	747.4	775.7	803.8	812.2	808.	744.3	176.
16.....	779.5	765.3	749.	731.1	720.4	722.2	746.5	794.2	809.2	824.3	818.5	803.7	776.1	186.2
17.....	787.2	763.8	747.7	724.1	716.8	721.4	745.6	769.6	800.5	830.1	838.	834.5	773.7	178.4
18.....	816.7	802.5	787.	770.6	762.8	772.5	804.1	831.8	862.	896.9	899.6	886.6	827.8	188.5
19.....	868.	859.	847.2	836.7	828.9	834.7	853.2	865.7	878.7	881.5	871.	854.8	856.5	192.3
20.....	772.	763.4	747.5	731.2	723.5	728.1	739.	744.9	749.5	758.	.....	.....	745.7	172.
21.....	761.2	741.5	721.9	698.9	690.	699.6	720.7	713.1	760.8	792.1	791.4	777.6	760.4	182.6
22.....	749.5	725.1	698.8	687.4	677.7	690.	732.2	740.3	750.8	776.4	781.6	769.7	738.6	183.8
23.....	694.7	692.7	677.3	670.9	676.9	677.7	690.	690.8	680.2	674.1	670.1	708.9	695.6	175.9
24.....	794.5	787.9	778.7	767.	779.7	778.8	779.	713.7	732.	752.6	763.	766.7	709.	166.3
25.....	845.4	845.1	831.1	816.5	810.3.	798.2	805.2	783.1	785.2	789.6	787.4	815.3	787.1	187.7
26.....	832.5	822.	812.8	785.2	774.	771.3	778.7	799.5	829.7	853.	867.	848.	829.6	196.5
Means.....	787.8	774.4	759.3	744.6	740.9	742.7	759.3	778.7	798.9	808.1	815.1	808.7	776.11	
Reduced to 32° F.	197.9	196.6	192.3	185.7	186.1	174.4	166.7	169.9	170.2	179.	194.1	201.2		184.14

* One minute late.
† Sun shining on box.

† This and the six following observations have been omitted, on account of the needle being fired by a spider's line, which was attached to the mirror.

[1841.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

Answer.]

	<i>h. m.</i> 5 57½ 0 17	<i>h. m.</i> 7 57½ 2 17	<i>h. m.</i> 9 57½ 4 17	<i>h. m.</i> 11 57½ 6 17	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 15 57½ 10 17	<i>h. m.</i> 17 57½ 12 17	<i>h. m.</i> 19 57½ 14 17	<i>h. m.</i> 21 57½ 16 17	<i>h. m.</i> 23 57½ 18 17	<i>h. m.</i> 1 57½ 20 17	<i>h. m.</i> 3 57½ 22 17	Means.
Aug. 3	69.3	68.6	67.6	68.5	67.7	69.7	72.6	75.	76.	76.9	75.9	74.8	71.8
4	73.9	72.	70.4	69.8	70.2	72.	74.6	77.	78.3	79.9	79.	77.8	74.6
5	76.9	76.	75.1	74.	74.	75.	77.	77.	81.	82.1	81.2	80.	77.6
6	79.2	79.	78.2	77.6	76.8	77.	77.	77.	76.9	76.	75.1	74.3	77.
7	78.6	72.	71.9	71.1	71.6	73.2	76.8	77.	78.5	79.	78.1	76.2	74.8
8	75.8	74.1	73.9	73.	72.5	74.2	75.7	77.3	79.1	80.5	80.	78.8	76.2
9	76.1	75.6	75.9	75.6	75.	75.3	77.	78.4	80.	80.8	80.3	80.	77.5
10	79.9	78.8	78.2	77.	77.6	78.5	80.	80.	80.2	80.	79.8	78.5	79.
11	78.3	78.	77.4	77.4	77.	77.2	78.4	79.5	80.	79.9	79.	78.6	78.4
12	77.	76.6	75.9	75.	74.3	75.	76.3	77.	77.1	76.7	75.8	74.9	76.
13	74.1	73.	73.2	73.	72.1	73.6	75.	76.2	76.8	76.8	76.	75.1	74.4
14	75.	74.2	73.2	72.8	72.	73.3	75.3	76.2	78.	78.9	77.8	75.8	75.2
15	74.7	73.2	72.7	71.	71.	72.2	74.5	75.6	76.5	77.2	77.	75.4	74.2
16	74.2	71.4	70.3	69.3	69.8	72.	74.5	75.6	77.8	79.9	78.5	76.6	74.1
17	75.7	74.9	73.2	72.	72.	73.2	76.3	77.2	80.5	79.7	78.3	76.9	75.7
18	75.9	74.6	73.7	73.	72.1	73.8	75.8	77.	79.1	80.1	79.7	78.9	76.1
19	77.9	77.	76.	75.	75.2	77.	80.3	82.2	83.9	83.9	83.	81.2	79.5
20	81.4	80.8	80.	79.7	79.	80.5	82.	83.1	83.9	82.7	81.	80.4	79.5
21	75.3	74.4	73.6	73.	72.4	73.5	75.	75.5	75.9	76.	75.5	74.5	74.5
22	73.2	72.	70.9	70.	70.	71.4	73.5	75.8	76.1	76.9	75.7	74.8	74.8
23	73.2	73.	70.9	70.	70.	71.3	74.	74.4	75.7	76.1	75.7	74.5	73.1
24	73.2	73.	70.9	70.	69.2	70.	71.	71.1	71.1	70.9	70.6	70.1	70.5
25	70.	69.8	69.6	69.3	69.2	70.2	71.9	74.	74.8	75.8	75.8	75.2	73.2
26	76.	76.4	76.2	76.	75.9	76.	76.8	77.	77.	77.	76.8	76.3	76.4
27	79.6	78.5	78.2	77.3	76.8	77.	78.3	79.2	80.7	81.3	80.6	79.5	78.9
28	79.	77.2	76.5	76.	75.1	75.8	76.6	78.	79.	80.	79.	78.9	77.5
Means	75.7	74.8	74.	73.4	73.1	74.1	75.9	77.1	78.2	78.6	78.	77.	75.85

Aug. 21.]

HORIZONTAL FORCE MAGNETOMETER.

[1841.]

[97]

232

Göttingen time... Observatory time	h. m. 6 02½ 0 22	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	Means.	Reduced to 32° F.
Aug. 2.....	419.6	471.5	447.5	453.4	476.3	476.6	464.1	467.4	465.9	466.1	535.9	480.4	472.9	358.1
3.....	505.	480.6	480.	452.3	461.6	494.5	460.5	487.5	489.5	526.1	494.5	497.5	485.8	363.1
4.....	500.2	518.6	497.7	484.3	501.8	511.	517.7	503.5	493.	503.9	505.7	487.4	502.1	369.9
5.....	490.6	491.1	495.	493.2	499.	543.2	496.3	486.3	502.4	503.7	499.5	516.1	501.8	372.8
6.....	496.6	489.	511.8	495.3	511.2	483.	528.4	487.4	483.9	523.1	532.3	542.9	507.9	384.1
7.....	511.	505.4	510.6	517.1	508.3	531.4	513.3	502.2	498.6	512.3	523.2	518.8	512.7	384.8
9.....	503.8	500.	467.1	467.5	486.	493.5	487.3	476.8	466.7	493.7	493.7	497.1	486.	354.3
10.....	504.8	495.3	488.2	480.1	504.7	515.	498.6	500.	507.1	509.1	501.	496.6	500.4	364.4
11.....	501.2	502.6	501.3	501.	524.5	537.8	502.3	479.	511.9	507.6	553.7	548.	514.6	381.2
12.....	523.8	535.1	521.8	499.8	508.4	518.3	469.4	452.2	480.7	493.3	489.	490.8	497.7	372.1
13.....	481.1	480.3	478.3	485.	502.	514.2	497.7	495.	490.3	503.	487.8	488.9	492.	370.2
14.....	478.3	471.1	475.2	467.	492.2	511.7	500.	488.8	479.1	466.3	517.2	526.8	486.9	363.1
16.....	507.4	502.6	498.1	494.4	521.1	538.7	550.4	507.	516.1	524.3	543.8	516.4	518.4	397.8
17.....	508.9	504.6	506.6	499.4	522.7	562.	519.	508.	501.8	519.7	521.9	528.	516.9	396.3
18.....	512.9	508.1	508.	507.4	515.9	563.2	538.1	519.9	521.1	535.7	523.8	513.8	521.5	396.2
19.....	509.7	509.7	508.3	498.	520.6	545.7	535.6	508.8	510.	517.6	521.4	512.3	516.3	389.6
20.....	513.7	501.4	506.6	499.	524.8	552.3	550.7	540.7	533.5	529.1	538.6	534.1	527.	389.5
21.....	526.4	526.4	525.	515.7	530.4	557.4	551.7	524.9	523.	522.2	523.2	526.	532.2	390.4
23.....	525.2	516.3	504.7	511.3	517.7	533.4	530.3	540.9	506.2	529.9	533.9	528.8	523.2	402.6
24.....	524.	530.7	518.9	513.1	537.5	550.	517.3	504.5	524.5	513.9	515.3	507.1	521.4	404.
25.....	503.5	511.5	505.	494.8	515.9	540.4	518.	489.8	503.3	539.8	532.7	538.6	516.1	399.4
26.....	516.6	516.2	511.	509.7	501.6	532.1	545.4	509.	522.3	576.7	579.5	554.9	531.3	421.7
27.....	539.3	506.2	506.2	490.6	514.	525.1	507.3	503.8	498.8	518.1	505.4	514.9	518.8	403.1
28.....	516.3	522.2	521.8	512.6	563.3	564.3	563.6	516.5	521.5	533.9	545.8	547.1	534.9	406.1
30.....	525.6	530.5	526.9	521.4	542.1	568.9	542.1	515.5	524.5	527.3	531.6	530.7	532.3	397.2
31.....	504.9	516.2	516.4	516.6	547.4	565.3	548.	513.	506.1	550.	552.4	518.5	530.4	399.6
Means.....	508.7	506.8	500.7	495.5	513.3	531.5	518.6	500.3.	503.1	519.3	523.6	517.7	511.59	
Reduced to 32° F.	383.7	384.4	380.9	377.8	395.6	410.6	392.7	369.8	369.7	384.5	391.1	388.7		386.73

August.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

[1841.]

Göttingen time..... Observatory time.....	h. m. 6 02½ 0 22	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	Means.
Aug. 2.....	68.8	69.	67.	67.7	69.2	72.2	74.8	76.2	77.	76.1	74.8	71.6	
3.....	73.	71.3	70.4	70.	71.4	74.	76.5	78.6	80.	79.3	77.8	74.3	
4.....	76.9	75.6	74.2	73.9	75.2	77.5	79.6	81.7	83.9	81.7	80.	77.6	
5.....	79.3	78.8	78.	77.	76.8	77.	77.	78.	79.2	78.1	76.3	74.7	
6.....	71.8	71.2	71.	70.8	73.8	75.9	78.	80.8	81.	80.6	79.9	77.4	
7.....	75.4	74.	73.8	72.5	75.5	78.5	80.1	82.1	84.8	83.3	81.7	79.1	
8.....	76.1	75.3	75.	74.4	76.	78.8	80.1	82.1	84.8	83.3	81.7	79.1	
9.....	80.	79.2	77.8	77.	78.	80.	82.1	84.8	87.	85.3	83.3	81.7	
10.....	78.	77.4	77.	76.9	78.2	80.	82.1	84.8	87.	85.3	83.3	81.7	
11.....	77.	76.4	75.	74.	75.2	77.	79.3	81.4	83.7	82.	80.8	79.9	
12.....	73.2	72.3	72.	71.	73.	75.	76.5	78.	80.1	79.9	78.9	77.3	
13.....	74.2	73.3	72.6	72.	73.8	75.	76.5	78.	80.1	79.9	78.9	77.3	
14.....	74.2	73.3	72.6	72.	73.8	75.	76.5	78.	80.1	79.9	78.9	77.3	
15.....	72.9	70.8	69.	70.	71.2	73.	75.	76.5	78.	76.9	75.4	74.1	
16.....	75.2	74.	73.	72.4	74.	76.	78.	80.1	82.1	80.1	78.9	77.3	
17.....	75.6	74.	73.	72.4	74.	76.	78.	80.1	82.1	80.1	78.9	77.3	
18.....	77.2	76.5	75.4	75.	76.5	78.	80.1	82.1	84.8	83.3	81.7	79.1	
19.....	81.1	80.4	79.6	79.	80.	82.	84.8	87.	89.9	88.3	86.7	85.1	
20.....	74.5	73.2	72.5	72.	73.8	75.	76.5	78.	80.1	79.9	78.9	77.3	
21.....	72.5	71.8	70.2	69.8	71.	73.	75.	76.5	78.	76.9	75.4	74.1	
22.....	72.3	71.2	70.	69.	70.	71.	73.	75.	76.5	78.	76.9	75.4	
23.....	72.3	71.2	70.	69.	70.	71.	73.	75.	76.5	78.	76.9	75.4	
24.....	69.4	69.	68.	68.	69.2	70.	71.2	73.	75.	76.5	78.	76.9	
25.....	76.	75.3	74.1	73.3	75.4	76.7	77.1	79.1	80.4	81.2	80.2	79.	
26.....	79.2	78.5	78.	77.3	78.2	79.8	81.4	83.7	85.7	84.8	83.3	81.7	
27.....	78.1	77.	76.	75.	75.8	76.3	77.	78.6	80.1	79.9	78.9	77.3	
28.....													
29.....													
30.....													
31.....													
Means.....	75.1	74.2	73.3	72.6	72.6	75.4	77.	78.	78.5	77.7	76.5	75.4	

Degrees Fahrenheit

[1841.]

TRIPLE OBSERVATIONS.

August.]

	Declination.			Vertical force.				Horizontal force.				Tempera- ture Fah- renheit.
	<i>h.</i> <i>m.</i> 13 52½ 8 12	<i>h.</i> <i>m.</i> 14 00 8 19½	<i>h.</i> <i>m.</i> 14 07½ 8 27	<i>h.</i> <i>m.</i> 13 50 8 09½	<i>h.</i> <i>m.</i> 13 57½ 8 17	<i>h.</i> <i>m.</i> 14 05 8 24½	Tempera- ture Fah- renheit.	<i>h.</i> <i>m.</i> 13 55 8 14½	<i>h.</i> <i>m.</i> 14 02½ 8 22	<i>h.</i> <i>m.</i> 14 10 8 29½		
Aug. 2	583.2	581.	579.6	656.8	657.2	657.8	67.7	473.6	476.3	475.5	67.7	
3	585.	585.5	583.7	690.1	691.8	693.	70.2	451.	461.6	470.7	70.	
4	587.	587.	585.8	747.8	748.3	749.3	74.	497.	501.8	501.9	73.2	
5	586.6	586.1	587.3	802.6	802.7	802.4	76.8	492.	499.	499.8	76.	
6	554.7	557.4	556.9	718.	720.3	720.8	71.6	516.	511.2	513.8	71.7	
7	589.3	589.1	590.7	729.1	728.1	728.2	72.5	507.	508.3	506.5	72.5	
8	578.1	577.3	576.3	775.5	775.5	775.	75.	484.	486.	489.2	74.4	
9	580.2	580.3	579.7	808.5	808.9	808.9	77.6	506.	508.7	509.9	77.2	
10	574.5	574.	573.	803.5	803.4	803.4	77.	524.6	524.5	528.1	76.2	
11	584.6	583.6	583.8	765.3	765.	764.5	74.3	512.9	508.4	515.8	73.3	
12	577.1	576.6	575.1	718.	718.	718.1	72.1	501.7	502.	503.3	71.7	
13	586.4	585.5	585.1	720.6	720.2	720.	72.	489.8	492.2	496.6	71.	
14	581.5	581.4	580.4	698.2	698.8	698.1	71.	523.	521.1	524.4	70.	
15	586.	584.8	584.1	672.2	673.	674.	69.8	516.8	522.7	528.5	69.2	
16	588.5	588.1	587.9	770.7	770.4	769.3	72.	518.	515.9	523.7	71.	
17	590.1	590.1	590.1	717.	716.8	716.9	72.1	518.3	520.6	522.8	72.	
18	584.1	584.	583.	792.5	792.8	792.9	76.2	522.2	524.8	526.4	75.5	
19	585.	584.2	583.5	829.6	828.0	828.3	79.	526.1	530.4	531.8	79.	
20	585.5	587.	588.	724.	723.5	723.4	72.4	515.3	517.7	517.6	71.5	
21	581.8	581.7	581.8	.....	.....	.....	.....	534.6	537.5	541.8	69.5
22	579.6	579.	578.2	690.	690.	690.2	70.	509.8	515.9	517.3	70.	
23	579.	579.	578.6	677.7	677.7	677.9	69.	503.	501.6	503.6	68.	
24	566.	564.	564.2	676.	676.9	677.7	69.2	510.7	514.	511.4	69.	
25	.....	586.6	.....	.....	779.7	.....	75.9	.....	553.3	.....	75.4
26	596.	595.2	596.6	810.5	810.3	809.2	76.8	538.	542.1	543.9	76.2	
27	587.	585.5	583.4	774.4	774.	773.2	75.1	548.6	547.4	551.	75.8	

SEPTEMBER.]

DECLINATION MAGNETOMETER.

[1841.

	h. m. 6 00	h. m. 8 00	h. m. 10 00	h. m. 12 00	h. m. 14 00	h. m. 16 00	h. m. 18 00	h. m. 20 00	h. m. 22 00	h. m. 0 00	h. m. 2 00	h. m. 4 00	Means.
Göttingen time.....													
Observatory time.....													
Sept. 1.....	574.	550.4	581.7	586.6	589.	582.1	586.3	586.7	583.	586.	581.9	584.4	587.8
2.....	561.6	563.	564.2	570.	565.4	565.4	569.	567.3	563.1	563.1	563.3	565.	563.2
3.....	562.9	565.8	565.3	567.9	566.2	565.	569.8	561.9	561.	567.4	561.6	565.3	566.9
4.....	561.3	560.9	562.8	562.8	563.7	563.7	561.1	564.6	564.2	561.4	562.3	561.8	563.1
5.....	563.8	564.	566.3	570.	573.8	566.	564.4	568.2	566.9	560.6	562.2	561.6	562.9
6.....	562.8	565.5	569.1	572.4	572.5	565.6	563.9	568.	566.2	560.2	569.1	567.	562.4
7.....	564.5	563.9	566.	566.7	571.	563.6	562.9	565.9	565.3	560.1	560.5	562.	561.4
8.....	561.1	563.5	565.5	568.1	573.	566.3	564.	562.8	568.	560.7	562.3	561.3	562.2
9.....	563.1	564.6	565.3	568.6	573.	566.	568.8	566.4	569.8	561.9	566.1	563.	563.8
10.....	565.8	565.2	567.6	571.1	570.3	560.2	561.8	565.3	561.2	561.1	563.	562.	562.9
11.....	563.1	570.	568.	567.7	574.1	562.3	564.4	561.5	562.8	563.9	562.2	564.9	564.6
12.....	568.7	574.	560.4	569.8	569.8	563.4	569.2	564.6	561.8	564.4	563.6	564.8	563.6
13.....	563.	562.	+563.6	569.8	569.4	562.1	565.5	567.3	564.	563.5	565.	563.7	563.2
14.....	562.	561.6	567.3	569.6	571.9	562.5	564.	568.8	562.1	564.4	571.3	590.	568.1
15.....	567.4	564.3	567.	569.2	571.1	561.1	569.9	564.	569.2	572.5	565.8	569.4	564.2
16.....	565.2	566.2	562.1	576.7	579.	563.8	550.1	560.4	566.4	562.	564.4	568.2	565.4
17.....	565.2	562.5	565.4	574.2	581.4	567.8	566.2	563.9	568.6	564.8	571.6	569.5	565.1
18.....	566.9	564.1	567.1	572.	571.8	563.4	563.7	568.	561.8	567.5	566.	563.2	564.6
19.....	564.8	566.	568.2	569.	565.7	568.5	567.	568.5	570.	562.4	564.1	566.2	564.6
20.....	569.6	569.	566.8	569.	570.	565.2	561.4	567.9	568.8	560.6	562.	564.	564.5
21.....	565.	566.8	567.3	571.7	570.6	569.1	562.1	549.1	543.	546.	563.2	584.6	562.4
22.....	572.9	569.	566.4	563.6	563.6	563.6	561.2	524.6	543.7	549.5	593.6	530.1	553.4
23.....	562.9	566.9	577.2	609.3	591.	603.8	595.	610.5	606.3	605.8	598.6	586.8	587.
24.....	565.	580.2	581.1	566.5	574.7	569.	567.7	571.3	591.1	582.1	562.3	579	577.6
25.....	592.9	594.6	590.1	567.9	574.1	564.2	560.7	551.5	590.	562.	562.3	567.5	567.5
26.....	570.2	561.7	590.1	567.9	574.1	564.2	560.7	554.	561.3	576.	562.8	562.2	567.8
27.....													
28.....													
29.....													
30.....													
Means.....	568.5	567.5	569.5	571.3	571.6	563.4	566.1.	565.3	561.9	565.	568.8	567.	565.49

* One minute late.

† One minute late.

September.]

VERTICAL FORCE MAGNETOMETER.

[1841.]

[97]

286

Giving time... Observatory time.	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.	Reduced to 32° F.
Sept. 1.....	830.1	831.3	790.4	755.9	744.6	748.	754.	771.	788.7	810.	818.1	808.	786.7	187.3
2.....	787.8	785.4	766.4	750.	740.5	.....	767.4	793.7	815.8	845.3	859.4	847.8	796.3	182.1
3.....	839.2	832.8	805.1	780.2	776.7	781.6	808.6	837.	856.	874.4	876.1	870.	827.1	187.2
4.....	863.1	848.3	840.8	832.	824.	827.	847.	860.3	874.1	879.7	875.9	860.4	852.7	196.3
5.....	786.	761.4	746.7	726.9	713.1	721.6	746.2	.....	823.	821.2	817.	805.4	769.9	181.3
6.....	791.3	773.1	760.4	743.4	737.	740.3	744.1	747.4	761.2	754.6	736.4	721.	750.8	178.4
7.....	711.	699.7	692.	684.	676.	686.2	700.6	717.5	.....	.....	774.2	762.6	710.6	170.6
8.....	742.	717.6	702.3	688.7	681.3	688.1	713.5	736.8	764.8	785.4	793.4	784.7	733.2	183.8
9.....	759.4	735.8	721.8	711.9	705.	708.7	727.4	738.2	759.	777.5	776.9	766.5	740.6	186.8
10.....	756.2	741.3	731.1	708.	696.2	696.1	700.7	716.6	737.6	759.1	767.	763.	730.1	187.4
11.....	767.6	743.7	730.3	738.2	728.8	717.1	717.1	713.9	714.6	718.7	719.7	714.5	727.	187.
12.....	718.	732.6	718.1	685.8	663.	655.7	656.4	677.5	659.2	717.5	708.9	692.8	689.6	178.
13.....	663.2	648.2	*614.5	595.5	590.2	600.6	631.7	663.6	703.4	714.5	711.8	693.9	652.6	161.2
14.....	680.2	667.4	645.9	627.4	610.2	614.8	637.5	654.	686.3	642.3	659.4	639.5	645.4	164.9
15.....	641.1	639.8	619.	613.2	589.5	592.3	596.	593.	593.2	576.	571.8	561.	599.1	161.7
16.....	547.6	538.	531.3	523.6	522.	539.2	566.2	588.2	614.5	633.7	645.	636.6	578.9	141.5
17.....	.....	648.2	625.2	610.3	600.1	595.4	594.3	606.	614.5	633.7	640.8	636.6	618.6	150.2
18.....	638.4	621.7	612.2	602.	594.	594.4	606.	616.4	639.5	666.3	666.1	647.8	625.	158.9
19.....	622.	619.	623.2	616.4	612.3	614.6	624.	634.8	646.9	636.1	639.4	640.8	627.4	158.3
20.....	638.7	634.8	631.5	628.3	625.1	638.2	650.7	659.	639.4	660.	680.5	672.	646.5	160.5
21.....	678.	670.	676.	678.2	680.	691.4	706.7	711.4	713.	712.6	708.9	743.8	697.1	166.2
22.....	777.7	743.8	732.4	787.7	765.3	738.4	716.6	707.2	730.	688.	705.4	755.1	742.3	186.1
23.....	672.	667.	677.4	639.3	593.8	596.5	622.5	640.7	669.2	685.	684.7	672.2	651.9	179.4
24.....	679.7	663.5	641.1	635.1	637.	614.3	667.1	683.8	717.	730.9	730.4	726.4	679.7	176.2
25.....	727.7	734.	752.	714.9	709.8	712.6	734.5	744.	756.4	766.7	761.6	765.2	740.	189.2
26.....	746.2	717.7	697.7	666.3	643.7	539.3	636.2	624.	616.8	630.9	619.7	596.5	652.9	191.2
Means.....	721.8	707.9	697.5	682.4	671.5	671.4	667.4	697.6	716.5	725.4	727.9	723.1	702.5	
Reduced to 32° F.	191.3	189.5	186.6	184.3	174.7	165.2	158.2	156.3	157.6	166.5	178.5	187.2		174.7

* Three minutes late.

September.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

[1841.

	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 13 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.
Göttingen time.....	76.7	75.5	75.5	74.4	74.5	74.5	75.7	77.	78.9	79.2	78.7	78.	76.4
Observatory time.....	76.	75.2	74.4	74.	74.5	74.5	77.	79.	80.7	81.7	81.7	79.8	77.5
Sept. 1.....	78.4	77.8	77.7	76.	77.5	77.5	80.	81.3	82.6	83.	82.	81.2	79.4
2.....	80.9	80.	79.7	79.	79.3	79.3	81.2	82.	82.8	83.3	82.	80.2	80.7
3.....	76.	75.	73.3	72.	73.5	73.5	75.7	76.	79.5	79.	78.2	76.7	75.6
4.....	76.3	75.4	74.8	74.	74.2	74.2	74.2	75.	75.3	74.	73.	72.4	74.4
5.....	73.	71.3	70.8	70.	71.2	71.2	73.8	74.	75.3	74.	75.	73.2	72.
6.....	71.9	71.	70.	69.3	70.7	70.7	73.9	74.5	75.3	76.9	76.	75.	72.7
7.....	73.1	72.	71.3	71.	70.8	71.7	73.2	74.1	75.8	75.8	75.	74.	73.1
8.....	73.1	72.9	72.	71.5	69.2	69.8	71.	73.	74.1	75.	74.8	74.	72.2
9.....	73.	72.9	72.	71.	71.	68.	72.	72.	72.9	72.9	71.3	71.6	72.
10.....	70.8	70.	68.6	67.2	66.	66.	70.	71.2	72.9	73.	71.7	68.9	69.9
11.....	68.	66.8	65.	64.	64.1	66.	68.5	70.7	72.7	73.	71.7	69.9	68.4
12.....	69.	68.	66.7	65.1	65.	66.5	68.	69.1	69.9	68.5	68.	67.7	67.6
13.....	66.3	66.	65.3	64.	64.	64.	64.5	65.	64.5	64.	62.9	62.	64.4
14.....	61.	60.5	60.	59.8	60.3	62.1	64.8	67.5	69.1	69.9	69.6	68.8	64.4
15.....	66.8	65.8	65.2	64.9	65.1	65.1	66.	67.	68.	68.5	68.	67.3	66.7
16.....	66.8	65.8	65.2	64.9	65.1	65.1	66.	67.	68.	68.5	68.2	66.8	66.9
17.....	66.	65.	64.	63.5	64.5	65.	66.7	67.8	68.	68.	68.	68.	66.8
18.....	67.4	67.	66.8	66.5	66.8	68.	68.5	69.	69.	69.	69.	69.	68.
19.....	69.	68.	67.3	67.5	70.	70.8	73.5	73.1	73.8	73.9	73.4	73.1	71.4
20.....	73.	72.8	72.9	72.5	72.2	73.7	74.2	74.5	74.9	74.3	73.8	71.	73.2
21.....	67.5	66.4	65.1	63.	63.	64.8	67.	69.	70.4	70.3	69.5	68.4	67.
22.....	67.4	66.5	66.2	65.5	65.8	67.5	70.	71.	73.8	73.	72.7	72.	69.3
23.....	71.6	71.2	71.1	71.	70.8	71.8	74.3	74.3	75.2	75.	74.1	73.	72.8
24.....	71.6	70.1	69.	67.	65.3	65.	65.5	65.	65.7	65.3	63.	62.5	66.9
25.....	71.3	70.4	69.7	68.9	68.8	69.5	71.2	72.1	73.4	73.4	72.7	71.7	71.1
Means.....	71.3	70.4	69.7	68.9	68.8	69.5	71.2	72.1	73.4	73.4	72.7	71.7	71.1

Degrees Fahrenheit.

Göttingen time. Observatory time.	h. m. 6 02½ 0 22	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	Means.	Reduced to 32° F.
Sept. 1.	539.9	568.4	539.1	527.1	562.	595.7	546.1	515.2	525.7	545.2	534.3	530.7	544.1	421.5
2.	520.1	522.	523.1	504.5	531.3	.....	524.	505.5	549.7	539.3	520.	521.2	523.7	397.1
3.	504.1	515.6	518.2	516.4	539.3	556.9	541.1	526.1	528.6	536.	523.4	512.	525.9	393.5
4.	516.4	515.6	520.3	498.8	524.3	556.9	577.1	540.3	521.1	530.	525.3	524.4	529.2	393.7
5.	508.9	508.2	504.1	498.9	518.8	538.8	533.8	523.1	523.8	523.8	524.3	510.2	518.1	397.1
6.	513.9	517.9	509.7	513.5	518.9	542.4	531.	530.2	511.9	511.8	516.3	515.9	515.9	399.4
7.	519.8	509.9	508.7	506.4	520.9	536.7	533.9	516.	516.6	514.2	519.	517.6	518.3	406.6
8.	511.7	506.	502.2	502.8	531.9	548.5	545.5	518.9	522.3	523.3	520.1	522.1	521.3	408.7
9.	513.7	511.4	506.8	509.7	530.6	540.5	547.3	520.1	521.5	539.6	524.	529.1	524.5	411.7
10.	528.2	520.6	512.4	510.3	538.6	546.	519.9	504.	502.6	503.3	499.9	504.8	515.9	404.7
11.	512.2	521.4	545.9	501.7	560.7	607.5	576.1	542.3	540.2	542.	534.1	530.6	542.9	432.9
12.	522.9	550.	576.6	524.5	551.7	574.1	573.2	532.6	540.8	543.3	533.1	496.7	543.2	439.6
13.	526.5	530.7	514.1	509.3	534.4	548.3	530.1	526.8	539.3	543.	509.5	521.	527.3	427.1
14.	523.9	526.7	512.6	507.7	522.1	550.9	531.5	515.8	531.6	532.1	546.6	535.2	528.1	430.1
15.	535.	536.	510.6	508.8	524.5	541.	537.1	509.7	510.1	511.3	500.3	493.4	517.3	428.8
16.	490.3	489.4	497.1	499.	528.6	555.7	534.3	524.9	519.	556.2	548.7	554.1	524.8	434.6
17. ....	.....	553.	516.5	516.5	537.6	565.4	562.	537.2	538.6	529.	514.5	530.3	539.1	443.1
18.	525.4	521.1	515.6	519.2	546.7	564.3	538.	525.1	529.2	529.4	527.6	518.7	529.2	432.9
19.	512.4	511.9	512.6	512.4	523.	522.5	508.9	526.7	529.9	512.2	511.3	514.4	516.5	430.7
20.	519.3	516.5	510.	506.8	514.3	528.	523.	513.3	511.	510.9	511.6	509.6	514.5	415.7
21.	508.	506.	512.6	508.2	513.	516.1	520.1	562.6	568.5	585.	617.3	653.4	646.7	436.7
22.	582.	614.7	601.	650.3	701.3	774.9	668.2	665.9	665.	706.1	720.7	634.5	664.5	550.5
23.	561.	670.4	547.1	550.2	576.2	662.8	670.3	570.3	555.2	574.2	555.3	556.2	571.6	475.6
24.	519.2	538.2	546.3	589.3	541.1	600.3	585.8	591.	568.	568.	570.8	564.7	564.1	461.3
25.	585.3	567.1	554.1	543.8	583.	628.9	584.	567.9	565.2	559.7	556.1	611.1	572.2	459.4
26.	598.2	550.4	555.	541.6	555.8	568.9	550.8	525.5	527.7	530.3	500.8	529.6	544.5	453.9
Means.....	528.7	530.	525.9	522.2	542.7	569.9	549.	536.7	536.4	542.4	536.6	535.8	537.9	
Reduced to 32° F.	420.3	424.4	423.1	421.1	440.2	466.3	440.6	424.	421.	427.9	424.	426.3		439.8

* Five minutes late.

[1841.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

SEPTEMBER.]

	h. m. 6 02½ 0 22	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	Means.
Göttingen time.....	76.1	75.	74.	73.	74.	74.	75.2	76.8	78.4	78.9	79.	78.5	75.8
Observatory time.....	75.2	74.	73.5	73.	74.	74.	77.	79.	81.1	81.7	80.9	79.8	77.2
	78.2	77.2	76.	75.6	77.	78.	80.	81.3	82.6	83.	81.9	81.	79.3
	80.2	79.8	79.2	79.	78.	79.3	81.	82.	82.5	82.	82.	80.	80.4
	75.1	74.3	72.4	71.8	73.	73.2	74.9	77.	78.	78.	77.8	76.7	75.2
	76.	74.8	74.	73.	73.	73.5	73.8	74.2	74.2	73.2	72.1	71.4	73.6
	71.	70.5	70.	69.	71.	71.	72.	73.2	74.	74.6	74.	72.3	71.9
	71.2	69.7	68.4	68.	70.1	70.5	72.2	74.	75.3	76.1	75.7	75.	72.2
	72.	71.	70.	70.	70.	71.	72.2	73.4	75.	75.	74.3	73.6	72.3
	72.3	71.3	70.	69.4	68.6	69.	71.	72.3	73.9	75.	74.2	73.8	71.7
	72.3	72.1	71.8	71.3	71.	70.5	71.4	71.7	71.2	71.	71.	70.7	71.3
	70.	69.	67.7	66.3	67.	67.8	69.	70.3	71.6	71.7	70.	67.9	69.
	67.	65.5	64.	62.8	65.3	66.	67.9	70.2	72.	71.9	71.9	68.9	67.8
	68.	67.	65.8	64.2	66.	66.	68.	69.2	69.9	68.	67.4	66.9	67.
	65.8	65.2	64.6	63.3	63.	63.4	64.	64.	63.9	63.	62.	61.	63.6
	60.6	60.	59.5	59.3	61.2	62.	64.	66.8	69.	69.5	69.1	69.	64.2
	66.3	66.3	65.3	64.5	64.	64.3	65.2	66.7	68.6	69.4	67.8	66.8	66.3
	66.3	65.5	64.6	64.	64.	64.3	65.8	67.7	70.	70.	68.7	66.2	66.4
	65.6	65.5	65.3	64.8	66.	65.5	66.	67.	67.5	67.5	67.5	67.5	66.2
	66.8	66.5	66.	65.5	66.2	67.1	68.	68.	68.8	68.8	68.5	68.5	67.3
	68.7	68.7	68.8	69.3	70.	70.5	72.	74.	74.	73.4	73.	72.9	71.3
	72.9	72.6	72.2	72.	72.	73.1	74.	74.	74.7	73.4	71.8	70.	72.7
	66.7	65.6	64.3	62.	63.	64.	66.	67.7	69.5	69.3	69.5	67.5	66.3
	66.6	65.7	65.3	64.6	65.2	67.2	70.	71.	72.	72.7	72.1	71.5	68.7
	71.2	70.8	70.5	70.	70.	71.2	73.	74.	75.3	74.9	73.8	73.	73.3
	70.8	69.3	68.5	65.6	64.	63.5	64.	64.	65.	63.8	62.	61.1	64.7
Means.....	70.7	69.7	68.7	68.1	68.6	69.	70.7	71.9	73.3	72.9	72.2	71.1	70.6

Degrees Fahrenheit.

[1841.]

DECLINATION MAGNETOMETER.

OCTOBER.]

	<i>h. m.</i> 6 00 0 19½	<i>h. m.</i> 8 00 2 19½	<i>h. m.</i> 10 00 4 19½	<i>h. m.</i> 12 00 6 19½	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 16 00 10 19½	<i>h. m.</i> 18 00 12 19½	<i>h. m.</i> 20 00 14 19½	<i>h. m.</i> 22 00 16 19½	<i>h. m.</i> 0 00 18 19½	<i>h. m.</i> 2 00 20 19½	<i>h. m.</i> 4 00 22 19½	Means.
Getting time.....													
Observatory time.....													
Oct. 1.....	561.5	563.2	566.4	565.3	571.7	561.7	563.8	556.	559.1	561.6	561.1	560.4	561.8
2.....	556.5	566.8	563.2	564.1	569.	559.2	551.7	550.6	558.6	559.6	560.9	569.	560.8
3.....	563.8	571.5	564.5	567.3	568.5	560.	549.5	549.6	558.4	562.2	562.5	560.7	561.5
4.....	561.6	562.6	563.2	567.8	570.5	566.6	557.1	549.9	556.6	562.3	572.	561.7	563.9
5.....	561.4	563.5	574.5	571.4	570.3	560.9	557.4	547.9	553.	560.8	563.8	562.6	562.3
6.....	563.	563.2	567.	562.9	568.7	563.4	561.	562.	558.8	577.1	561.	564.6	564.4
7.....	561.9	562.1	563.1	566.2	567.6	564.2	569.	562.	548.6	567.1	566.2	561.5	561.5
8.....	563.5	560.	564.3	567.	567.9	562.	554.	556.2	570.5	563.2	565.	566.3	563.2
9.....	566.8	563.	562.	564.2	568.	563.	554.1	556.	559.9	562.1	569.	560.8	562.4
10.....	561.	561.9	561.8	566.3	562.2	565.2	543.1	545.9	562.4	563.5	562.9	568.3	565.3
11.....	570.5	576.	579.7	571.4	578.9	575.3	568.	568.7	590.5	578.2	583.	*576.	575.5
12.....	576.1	568.7	577.	566.	569.1	584.	579.2	580.1	573.8	574.	570.	581.1	578.3
13.....	572.5	576.9	568.	568.	572.9	576.9	571.7	579.1	580.4	576.8	574.7	572.2	574.1
14.....	570.8	569.5	566.7	563.3	561.6	550.2	555.	578.4	578.	575.	569.7	571.8	565.4
15.....	564.7	564.3	563.3	570.6	570.9	575.	565.1	573.5	571.	572.7	572.6	569.7	570.6
16.....	573.	569.	567.7	572.7	580.	573.6	562.3	578.5	573.5	571.	585.	569.1	572.5
17.....	567.8	563.5	562.	563.	566.7	.....	.....	563.5	566.3	560.6	564.2	575.	565.1
18.....	576.5	576.7	558.1	565.6	552.7	564.5	574.5	572.7	573.5	576.1	573.1	569.	569.4
19.....	570.	566.9	572.2	572.7	579.	576.4	570.6	568.	570.	569.9	567.2	570.7	571.1
20.....	567.2	566.1	568.5	568.7	573.7	569.7	569.8	570.9	574.3	575.	572.2	575.4	571.
21.....	563.1	603.	596.	568.4	566.4	597.2	593.	561.8	584.8	592.2	594.2	579.5	589.1
22.....	574.6	573.4	576.3	560.1	566.7	573.9	561.8	591.4	583.2	585.1	588.1	578.9	571.
23.....	575.8	572.	569.3	565.5	567.5	569.3	572.4	574.1	583.5	581.8	576.2	586.7	574.5
24.....	566.9	584.3	580.	578.3	578.7	586.5	575.7	573.9	571.9	569.6	569.6	567.1	578.9
25.....	570.	570.6	568.2	573.4	577.	568.5	561.5	562.8	565.6	566.	570.	567.8	567.8
26.....	570.3	570.	571.	571.4	576.2	570.5	565.2	566.	567.	569.1	567.8	568.	569.4
Means.....	569.3	569.6	569.	568.3	571.7	569.4	564.	564.6	564.8	570.5	570.3	569.4	568.4

* Sixty-six minutes late.

* Seven minutes late.

Getting time. Observatory time.	h. m. 5 57 3 0 19	h. m. 7 57 3 2 17	h. m. 9 57 3 4 17	h. m. 11 57 3 6 17	h. m. 13 57 3 8 17	h. m. 15 57 3 10 17	h. m. 17 57 3 12 17	h. m. 19 57 3 14 17	h. m. 21 57 3 16 17	h. m. 23 57 3 18 17	h. m. 1 57 3 20 17	h. m. 3 57 3 22 17	Means.	Reduced to 32° F.
Oct. 1.....	587.	574.2.	558.3	540.	527.7	534.8	556.3	587.	593.9	609.	606.	591.	572.1	179.8
2.....	576.5	555.	554.4	557.3	493.5	502.2	518.	534.	537.7	532.5	527.5	523.1	534.3	184.7
4.....	392.	403.3	386.2	383.5	385.2	402.9	414.	427.9	*490.9	461.	447.6	439.1	420.3	158.4
5.....	426.2	413.5	400.3	385.	377.4	388.1	406.6	440.5	467.2	482.8	498.3	475.	429.2	137.6
6.....	462.8	451.4	459.4	423.1	410.1	420.5	449.2	457.6	483.1	501.2	504.7	490.5	459.	144.5
7.....	467.9	458.3	450.3	419.	407.5	423.9	443.3	468.8	501.1	507.8	510.7	517.	484.6	148.3
8.....	516.8	511.2	506.4	500.3	493.5	505.7	508.7	508.6	522.7	505.8	510.2	510.3	508.3	137.1
9.....	506.	501.8	497.6	489.	485.	511.1	542.2	560.6	573.7	529.9	516.1	502.5	518.	127.9
11.....	492.3	476.2	453.4	420.6	396.8	407.2	439.1	467.5	501.	508.6	511.9	512.5	455.5	134.8
12.....	511.2	510.9	515.3	517.	518.	525.3	534.1	546.5	551.3	562.	565.	566.6	535.3	137.1
13.....	561.9	549.6	555.2	520.3	507.7	519.7	539.2	535.8	542.5	538.3	526.9	+512.9	534.1	150.7
14.....	502.1	487.5	461.6	426.5	411.3	418.6	440.6	456.	480.4	489.4	479.1	463.2	459.7	147.9
15.....	451.5	447.6	430.8	404.4	400.8	410.9	437.2	461.6	502.8	506.8	503.7	503.5	455.1	146.
16.....	506.1	505.9	492.6	.....	490.6	489.7	486.5	486.5	484.8	479.	470.3	462.3	486.8	152.
18.....	402.1	386.1	364.3	342.6	324.3	349.2	382.3	402.3	418.6	429.5	422.6	408.3	386.8	138.8
19.....	392.7	370.	349.2	332.5	321.7	327.	347.7	358.	367.	375.8	383.	380.1	358.7	136.
20.....	382.3	384.2	377.8	374.1	378.2	.....	.....	468.2	.....	468.9	464.3	466.	418.2	138.8
21.....	459.5	446.	432.3	431.1	427.5	449.4	469.8	473.2	492.	484.7	473.5	461.	458.3	147.6
22.....	447.8	431.8	418.3	406.5	402.8	422.6	444.3	444.2	455.	446.2	436.3	430.8	432.2	148.7
23.....	415.2	401.	385.	373.5	362.1	377.	397.8	411.7	429.6	427.4	423.4	418.7	401.9	141.
25.....	364.1	392.2	361.	331.8	318.9	299.7	304.3	299.7	305.7	306.5	305.7	290.8	323.4	137.1
26.....	399.2	292.9	275.6	249.	229.	236.7	271.9	299.5	328.3	350.5	362.5	359.5	296.2	126.1
27.....	358.4	358.2	349.8	342.5	327.	384.4	363.9	390.3	420.	438.9	440.1	445.	380.7	139.1
28.....	457.3	403.9	389.	360.1	360.8	361.5	364.	370.3	397.2	406.2	403.4	+398.3	387.7	146.1
29.....	397.5	397.3	397.4	398.3	400.	421.5	461.4	494.2	519.8	529.4	525.7	519.5	455.2	140.7
30.....	516.1	509.5	501.8	498.9	496.8	500.4	508.3	518.7	539.8	555.2	562.8	561.6	522.5	151.3
Means.....	456.	446.8	435.2	417.1	409.4	421.2	440.8	457.	476.2	478.2	476.	469.5	448.75	
Reduced to 32° F.	156.3	157.9	155.8	152.5	142.1	136.	131.7	129.	133.3	143.4	149.3	152.3		146.

* Window open, sun on needle.

† Seven minutes late.

+ Sixty-seven minutes late.

October.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

[1841.]

Göttingen time..... Observatory time.....	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means.
Oct. 1.....	61.6	60.4	59.2	58.	57.8	59.	61.2	62.5	64.	64.	62.9	61.8	61.1
2.....	59.8	58.5	57.1	56.	55.2	56.8	59.	62.5	64.	58.3	58.1	57.3	57.9
3.....	48.	47.8	47.8	47.5	48.	49.5	50.5	52.	52.3	54.8	54.3	53.5	51.4
4.....	52.8	51.8	50.9	50.2	50.	51.	53.	56.	57.	57.5	57.3	56.	53.6
5.....	55.3	54.	53.	52.1	52.	53.4	56.	57.	58.6	59.1	58.	56.	55.3
6.....	55.3	54.1	53.9	51.7	51.8	53.3	55.2	57.3	59.4	59.5	59.1	59.2	55.8
7.....	59.4	58.8	58.1	57.8	58.	59.8	59.7	60.	61.1	61.	60.	59.9	59.8
8.....	59.2	58.9	58.5	58.	58.1	60.2	62.8	64.	64.9	63.9	61.3	60.7	60.9
9.....	56.6	55.2	54.1	52.5	52.	54.	56.2	58.2	59.7	60.	59.9	59.5	56.5
10.....	59.8	59.9	60.2	60.	60.	61.	61.9	62.3	63.2	63.2	63.2	63.	61.5
11.....	62.2	61.5	60.2	59.6	59.2	60.5	61.6	61.	61.3	60.1	59.2	58.	60.4
12.....	57.1	55.8	54.5	52.5	52.2	53.1	55.	56.	57.2	57.2	56.	55.	55.1
13.....	54.	53.2	52.3	51.1	51.	53.	55.	57.	58.9	58.5	58.1	57.9	54.9
14.....	57.8	57.8	57.7	.....	57.	56.9	57.	57.7	57.	56.	55.3	54.7	56.9
15.....	50.5	49.2	48.5	47.	46.5	49.	51.1	52.2	53.8	53.8	52.	50.8	50.3
16.....	49.7	47.9	47.2	46.2	45.9	47.	48.	49.2	50.	50.	50.3	50.2	48.5
17.....	50.	49.8	50.	50.1	50.3	.....	.....	56.7	.....	56.	56.	55.	53.7
18.....	54.2	53.	53.	53.2	53.5	55.3	56.7	57.9	57.2	56.1	55.6	54.5	55.
19.....	53.4	52.4	51.6	51.	51.5	53.2	54.2	55.6	54.8	53.8	52.9	52.3	53.
20.....	51.1	50.3	50.	49.	48.8	50.5	52.	53.9	53.8	53.	52.4	52.3	51.4
21.....	48.	47.2	46.2	44.5	44.8	45.1	46.	47.7	46.2	45.3	44.9	44.	45.8
22.....	43.2	42.5	41.3	40.	40.2	42.	45.	46.6	46.5	49.	48.9	48.5	44.6
23.....	48.	48.	47.3	46.4	46.	47.3	50.2	51.9	54.	54.	53.8	52.2	49.9
24.....	51.2	50.	49.	48.	47.3	47.9	49.1	50.9	51.8	51.9	50.8	50.9	49.9
25.....	51.	51.	51.	51.3	51.3	53.5	56.9	58.8	60.4	60.	59.6	58.7	55.3
26.....	58.9	58.	57.7	57.5	57.3	58.	59.	60.2	61.9	62.	62.5	61.5	59.5
Means.....	54.2	53.4	52.7	51.6	51.8	53.2	54.9	56.3	57.4	56.8	56.2	55.5	54.5

Degrees Fahrenheit.

* Sun on needle—window open.

HORIZONTAL FORCE MAGNETOMETER.

Остонец.]

[184].

Göttingen time. Observatory time	h. m. 6 02½ 0 22	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	Means.	Reduced to 32° F.
Oct. 1.....	518.4	513.5	504.2	500.1	518.3	529.3	523.	518.9	524.8	523.2	524.1	519.4	518.1	439.4
2.....	506.8	508.1	495.5	503.2	503.	511.3	509.2	513.9	506.9	507.6	499.3	496.5	505.1	434.8
4.....	492.3	469.7	482.1	484.5	487.8	492.6	500.9	485.8	477.2	477.5	479.3	479.9	484.1	434.
5.....	482.3	477.1	471.3	469.3	484.8	496.5	494.6	492.4	477.1	477.2	517.5	491.9	486.	438.
6.....	496.7	480.8	457.4	487.3	496.5	514.9	514.	564.3	533.	533.8	524.2	506.5	508.2	444.6
7.....	499.6	493.1	487.2	494.3	491.8	500.8	500.8	495.	500.9	516.8	529.6	527.3	503.	438.
8.....	515.5	512.3	507.6	494.7	496.1	529.	563.7	574.	578.2	586.2	537.7	543.4	536.4	460.2
9.....	542.8	536.5	528.6	514.3	534.5	546.4	566.3	531.5	580.3	587.	583.3	552.7	549.6	470.4
10.....	543.5	535.2	526.3	496.8	515.3	527.6	524.6	516.1	524.	526.5	516.6	523.	522.9	466.5
11.....	522.	523.	518.1	526.1	543.2	570.	564.	542.3	532.3	527.5	529.6	527.7	535.4	458.6
12.....	512.	518.9	516.5	518.6	539.4	563.6	549.3	530.5	547.7	522.	538.8	520.1	530.5	453.5
13.....	508.8	478.	493.3	491.6	511.6	527.5	505.8	502.3	500.9	514.2	507.7	525.2	506.	445.2
14.....	517.6	507.1	494.9	491.	514.3	534.9	525.6	512.3	510.9	515.4	535.2	526.1	513.6	451.2
15.....	521.4	512.	512.5	.....	520.5	538.8	557.6	530.	517.7	507.2	518.	506.	531.6	458.3
16.....	496.8	488.4	485.9	490.	500.6	506.5	556.	509.2	506.2	495.	495.	491.9	499.3	451.7
17.....	479.5	491.1	480.8	476.5	487.2	504.	539.1	499.2	498.	492.4	507.3	503.	495.7	452.3
18.....	498.7	497.9	493.5	498.9	499.6	.....	.....	527.	.....	533.4	533.2	520.8	511.4	456.4
19.....	558.7	517.2	523.2	504.2	568.1	538.7	523.1	540.7	525.7	522.5	524.5	515.5	530.1	467.9
20.....	504.3	505.4	496.8	491.5	512.8	526.	534.2	514.7	501.7	497.7	511.6	527.1	51073	454.3
21.....	509.9	498.	493.2	489.	508.3	524.6	515.6	510.9	501.9	508.7	500.2	494.	504.5	452.7
22.....	552.8	511.	486.4	501.2	555.7	512.5	535.2	556.8	548.7	530.4	524.2	521.6	528.1	493.4
23.....	500.6	501.	500.	525.2	502.3	512.8	533.6	556.8	512.5	520.6	517.1	519.2	514.8	482.
24.....	509.6	501.	516.	497.8	515.	532.2	538.	524.	521.4	537.8	534.1	566.3	525.	476.8
25.....	555.3	533.5	514.8	513.2	509.4	506.4	515.3	512.2	507.5	497.5	491.	*499.8	513.	465.1
26.....	501.3	499.2	500.2	501.2	511.7	525.1	547.6	550.9	520.2	520.9	521.3	526.8	518.8	456.2
27.....	523.3	519.6	517.9	523.1	543.8	562.	555.7	542.6	527.5	522.6	526.4	528.2	532.7	456.3
Means	518.8	504.4	500.4	499.3	514.2	524.	531.	523.8	519.1	519.3	520.3	517.6	515.6	
Reduced to 32° F.	452.6	446.7	445.2	446.9	460.2	467.2	470.	458.3	451.1	451.9	454.2	453.8		454.8

* Sixty-seven minutes late.

[1841.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

October.]

	h. m. 6 02½ 0 22	h. m. 8 02½ 2 22	h. m. 10 02½ 4 22	h. m. 12 02½ 6 22	h. m. 14 02½ 8 22	h. m. 16 02½ 10 22	h. m. 18 02½ 12 22	h. m. 20 02½ 14 22	h. m. 22 02½ 16 22	h. m. 0 02½ 18 22	h. m. 2 02½ 20 22	h. m. 4 02½ 22 22	Means.
Göttingen time.....													
Observatory time.....													
Oct. 1.....	60.6	59.5	58.4	57.4	56.9	58.	60.	62.	63.	62.9	61.8	60.6	60.1
2.....	69.2	57.7	55.7	54.5	54.8	56.	59.	59.	58.2	57.9	57.6	57.	57.1
4.....	46.8	46.7	46.6	46.6	48.	48.8	50.	51.8	53.2	53.4	53.9	52.8	49.9
6.....	52.	51.1	50.1	49.4	49.	50.	52.	54.1	56.	56.9	56.6	55.1	52.7
8.....	54.6	53.	52.	50.6	52.	52.5	55.	56.7	58.	58.6	57.3	56.	54.7
10.....	54.2	53.	51.8	50.9	51.9	53.	56.	57.	59.	59.	58.9	58.	55.2
12.....	59.2	58.5	57.8	57.4	57.6	58.5	60.	60.	60.8	60.8	60.	59.5	59.2
14.....	59.	58.4	57.8	57.4	58.8	60.	61.8	63.	64.	63.	60.8	59.9	60.3
16.....	55.8	54.3	52.6	51.	51.	52.8	56.2	58.	59.	59.3	59.8	59.3	55.7
18.....	59.4	59.4	58.8	59.6	60.	60.8	61.7	62.2	63.	62.8	63.	62.9	61.2
20.....	61.7	60.9	59.6	59.1	59.	59.2	60.	60.2	60.	59.	58.	57.	59.5
22.....	56.4	54.2	52.5	50.5	51.	51.2	53.5	54.8	56.	55.9	55.	53.9	53.7
24.....	53.2	52.3	51.4	50.	51.	52.	54.4	56.2	58.	57.9	57.9	57.8	54.3
26.....	57.8	57.7	57.5	57.	56.6	56.5	57.	57.	56.	55.2	55.	53.7	56.4
28.....	49.3	48.	47.	45.7	46.2	47.3	49.	51.	52.	51.9	51.	49.8	49.
30.....	48.9	46.8	46.	44.9	44.5	45.3	47.	48.7	49.1	49.8	49.9	49.6	47.5
Oct. 1.....	49.4	49.3	49.4	49.4	49.7	51.	55.8	56.2	56.2	55.8	55.	54.2	52.
2.....	53.5	52.4	52.	52.4	53.	51.3	56.8	56.2	56.3	55.5	54.9	53.6	54.2
4.....	52.7	51.7	50.7	50.	51.	52.	53.	54.	53.2	52.7	52.	51.	52.
6.....	50.5	49.5	48.9	47.9	48.	49.6	51.	52.2	53.	52.2	51.7	51.7	50.5
8.....	47.2	46.3	46.4	43.7	43.9	43.5	44.	43.2	44.2	43.3	42.6	42.6	44.4
10.....	42.	41.	40.	39.	40.	41.	43.6	46.	48.	48.	47.9	47.8	43.7
12.....	47.7	47.5	46.5	45.5	45.2	46.2	48.6	51.	53.7	53.9	53.	51.9	49.2
14.....	50.8	49.2	48.	47.1	46.8	47.	48.2	50.	51.	50.9	49.7	50.	49.1
16.....	50.2	50.5	50.4	50.4	51.	53.	56.	58.1	60.2	59.9	59.	58.3	54.7
18.....	56.3	57.9	57.5	57.2	57.	57.8	59.	60.3	61.7	61.5	62.	61.	59.3
Means.....	53.6	52.6	51.7	50.7	51.3	52.3	53.8	55.4	56.3	56.1	55.6	54.8	52.7

Degrees Fahrenheit.

Göttingen time..... Observatory time.....	<i>h. m.</i> 13 52½ 8 12	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 07½ 8 27	<i>h. m.</i> 13 50 8 09½	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 14 05 8 24½	Tempera- ture Fah- renheit.	<i>h. m.</i> 13 55 8 14½	<i>h. m.</i> 14 02½ 8 22	<i>h. m.</i> 14 10 8 29½	Tempera- ture Fah- renheit.
Oct. 1.....	572.1	571.7	571.7	527.3	527.7	527.1	57.8	514.9	518.3	518.9	56.9
3.....	569.	569.	568.9	494.4	493.5	493.3	55.2	502.4	503.	503.5	54.8
4.....	569.8	568.5	568.	384.3	385.2	385.6	48.	484.2	487.8	489.	48.
5.....	570.9	570.5	569.8	378.1	377.4	376.8	50.	483.2	484.3	485.5	49.
6.....	571.5	570.3	568.5	410.7	410.1	410.4	52.	493.	496.5	493.6	52.
7.....	565.	568.7	568.4	407.6	407.5	407.2	51.8	495.2	491.8	491.5	51.9
8.....	568.1	567.6	567.4	497.1	493.5	496.8	56.	498.8	496.1	498.4	57.6
9.....	567.3	567.9	568.	484.9	485.	485.3	58.1	530.4	534.5	538.7	58.8
11.....	568.3	568.	567.7	397.8	396.8	395.7	52.	515.2	515.3	518.	51.
12.....	561.7	562.2	561.5	518.	518.	518.	60.	540.	542.2	544.2	60.
13.....	578.8	578.9	568.7	508.	507.7	507.6	59.2	537.5	539.4	538.6	59.
14.....	589.1	589.1	590.1	412.4	411.3	411.	52.2	512.1	511.6	513.4	51.
15.....	571.9	572.9	573.	400.6	400.8	400.	51.	513.7	514.3	514.1	51.
16.....	563.6	563.3	564.	490.9	490.6	490.7	57.	518.2	520.5	520.1	56.6
18.....	579.5	570.9	580.7	325.7	324.3	324.	46.5	497.3	500.6	499.8	46.2
19.....	580.	580.	576.2	323.2	321.7	322.5	46.9	485.	487.2	488.1	44.5
20.....	585.7	586.7	588.7	378.	378.2	378.5	50.3	497.8	499.6	499.5	49.7
21.....	.....	552.7	.....	.....	427.5	.....	53.5	.....	569.1	.....	53.
22.....	576.5	579.	581.6	402.9	402.8	402.7	51.5	513.	512.8	512.9	51.
23.....	573.	573.7	574.8	362.6	362.1	362.	48.8	506.2	508.3	510.5	48.
25.....	580.7	586.4	582.2	317.6	318.9	313.8	44.8	570.6	555.7	516.5	43.9
26.....	567.	565.7	565.1	230.4	229.	227.4	40.2	495.6	502.3	509.6	40.
27.....	568.9	567.5	566.5	327.6	327.	326.4	46.	515.2	515.	518.1	45.2
28.....	578.1	578.7	580.3	351.5	350.8	351.2	47.3	514.3	509.4	.....	46.8
29.....	577.2	577.	577.7	400.	402.6	402.5	51.8	511.	513.2	513.2	51.
30.....	576.2	576.2	576.2	496.7	496.8	496.7	57.3	542.	543.8	545.3	57.

November.]

DECLINATION MAGNETOMETER.

[1841.]

Göttingen time..... Observatory time.....	h. m. 6 00 0 19½	h. m. 8 00 2 19½	h. m. 10 00 4 19½	h. m. 12 00 6 19½	h. m. 14 00 8 19½	h. m. 16 00 10 19½	h. m. 18 00 12 19½	h. m. 20 00 14 19½	h. m. 22 00 16 19½	h. m. 0 00 18 19½	h. m. 2 00 20 19½	h. m. 4 00 22 19½	Means.
Nov. 1.....	569.1	568.9	569.1	569.0	572.	568.1	568.4	568.	568.2	580.	565.8	563.9	565.8
2.....	568.8	568.6	568.5	568.	568.5	568.	568.	568.4	568.5	567.	571.2	561.8	561.
3.....	561.1	562.1	564.7	563.4	568.	563.	561.8	561.5	567.	567.6	569.	560.1	559.9
4.....	569.5	571.8	578.6	557.8	565.	563.6	564.8	564.8	569.9	564.2	564.2	565.	563.2
5.....	561.9	561.1	548.5	560.4	562.3	567.2	565.	562.2	567.	563.1	570.5	564.	569.6
6.....	561.7	568.	563.4	561.1	562.6	565.9	564.4	569.2	565.6	565.2	571.7	570.8	560.
7.....	563.	569.6	562.8	562.3	569.8	561.9	562.9	563.5	560.	561.7	564.5	563.3	560.4
8.....	562.9	562.2	562.8	564.5	570.2	564.2	561.4	568.5	560.9	568.	568.2	563.7	560.2
9.....	569.8	561.9	562.4	569.8	568.9	565.1	560.3	561.8	563.1	563.1	568.9	567.5	557.7
10.....	564.1	568.7	560.2	561.9	566.6	562.5	568.1	563.3	568.8	561.2	563.2	562.1	562.6
11.....	561.1	569.3	567.3	562.9	561.3	564.3	569.3	566.5	568.	566.9	563.	564.8	563.
12.....	564.5	562.6	565.1	565.5	566.9	564.1	566.2	566.6	567.7	560.2	562.9	568.1	562.5
13.....	561.9	549.	552.	564.7	565.2	569.1	564.	568.4	569.8	569.8	567.8	562.8	561.2
14.....	562.8	563.	567.	565.3	563.7	569.5	561.8	566.7	564.	563.5	566.1	567.5	565.8
15.....	564.8	564.5	567.	563.6	563.	561.3	562.	569.	567.7	563.1	563.	563.	565.2
16.....	568.1	566.	567.3	569.	560.7	564.6	564.4	565.8	561.	569.8	569.7	562.5	566.3
17.....	573.2	578.9	567.2	568.6	568.7	560.8	567.8	561.3	565.1	568.4	577.6	560.	563.9
18.....	531.2	560.1	538.3	541.8	546.2	543.2	541.8	561.6	565.2	573.2	565.2	563.8	560.1
19.....	553.	553.3	553.9	565.	557.7	543.9	541.	543.9	552.5	563.	561.	560.	560.5
20.....	566.6	564.9	563.5	561.7	547.3	549.	543.8	543.9	548.	562.5	563.6	565.4	560.7
21.....	566.1	548.9	546.4	548.	547.8	543.4	537.1	537.7	546.5	560.5	561.8	564.4	560.2
22.....	548.4	560.	564.3	563.8	560.2	562.3	567.5	564.	566.8	561.6	567.3	561.3	565.6
23.....	568.3	566.1	566.8	566.6	563.	564.1	568.3	564.	568.5	568.1	567.2	566.4	566.9
24.....	547.5	543.1	545.6	547.3	549.1	539.1	531.5	542.	563.	564.2	564.2	564.6	564.9
25.....	568.2	567.9	568.2	560.	560.	568.7	562.5	563.6	566.6	567.8	567.5	566.9	563.9
26.....	566.4	564.5	567.6	569.3	569.8	564.4	568.4	569.3	562.	566.1	567.	565.6	565.
27.....	567.4	568.2	569.4	567.7	560.6	565.6	569.2	569.5	563.3	567.7	569.9	567.3	566.3
28.....	567.4	568.2	569.4	567.7	560.6	565.6	569.2	569.5	563.3	567.7	569.9	567.3	566.3
29.....	567.4	568.2	569.4	567.7	560.6	565.6	569.2	569.5	563.3	567.7	569.9	567.3	566.3
30.....	567.4	568.2	569.4	567.7	560.6	565.6	569.2	569.5	563.3	567.7	569.9	567.3	566.3
Means.....	567.4	568.2	569.4	567.7	560.6	565.6	569.2	569.5	563.3	567.7	569.9	567.3	566.3

* Three minutes late.

Göttingen time... Observatory time	<i>h. m.</i> 5 57½ 0 17	<i>h. m.</i> 7 57½ 2 17	<i>h. m.</i> 9 57½ 4 17	<i>h. m.</i> 11 57½ 6 17	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 15 57½ 10 17	<i>h. m.</i> 17 57½ 12 17	<i>h. m.</i> 19 57½ 14 17	<i>h. m.</i> 21 57½ 16 17	<i>h. m.</i> 23 57½ 18 17	<i>h. m.</i> 1 57½ 20 17	<i>h. m.</i> 3 57½ 22 17	Means.	Reduced to 32° F.
Nov. 1.....	524.6	521.7	514.7	513.8	511.	525.1	560.4	567.9	625.7	686.	616.5	609.	561.4	149.7
2.....	603.1	600.4	587.7	586.2	586.2	595.1	591.3	605.	617.2	617.7	605.5	596.5	597.7	163.6
3.....	563.4	544.3	519.1	480.4	436.2	441.	479.1	502.1	523.6	538.6	527.	514.	505.3	146.2
4.....	515.2	490.7	464.2	473.7	439.2	424.4	419.	409.	391.2	389.5	352.8	343.	434.2	146.1
5.....	331.	338.1	333.7	326.2	319.1	331.	339.9	337.4	338.9	342.4	346.2	347.2	335.	123.1
6.....	356.	357.9	354.8	322.5	309.	311.5	329.9	340.2	354.1	357.2	353.8	338.6	340.5	125.9
7.....	386.4	380.	373.3	320.1	273.5	275.8	312.	328.9	352.7	352.7	331.9	338.6	297.	117.5
8.....	342.8	339.7	331.7	318.2	306.7	319.1	353.5	372.9	385.4	388.1	384.3	371.	351.1	125.7
9.....	363.2	353.7	343.4	326.7	304.6	298.	306.7	306.3	311.7	314.5	312.8	310.3	321.	128.
10.....	308.1	308.2	303.3	296.4	291.6	294.2	310.3	328.6	337.9	340.1	341.7	342.	316.9	122.5
11.....	342.9	352.3	349.9	496.6	347.4	355.6	364.3	379.2	395.7	404.8	407.	402.	383.2	136.9
12.....	393.	380.9	370.6	354.4	336.7	341.1	358.9	360.4	372.8	370.8	368.	353.3	363.	134.9
13.....	361.6	349.7	329.	312.6	297.9	306.	312.2	316.3	322.3	318.8	298.7	293.4	317.8	134.2
14.....	271.2	257.6	246.3	233.	225.	234.8	253.7	266.5	280.8	284.5	282.8	273.6	259.1	121.4
15.....	264.	256.7	250.5	242.6	232.1	240.6	245.6	257.8	283.6	291.1	293.2	293.	282.6	118.2
16.....	298.2	302.7	304.6	306.2	305.	305.7	305.4	309.6	314.1	281.6	286.6	842.7	305.2	123.
17.....	304.1	341.4	294.4	284.6	252.1	233.3	213.6	207.5	201.4	200.7	207.5	222.	246.9	123.7
18.....	274.5	245.8	261.	276.4	253.5	250.	249.8	253.7	262.5	270.5	274.3	277.2	262.4	118.
19.....	216.	293.2	294.1	292.9	292.5	305.6	312.6	318.	331.1	356.2	381.	402.	316.3	103.
20.....	425.	447.2	453.4	452.1	439.	450.7	475.1	496.5	485.	475.2	461.4	445.1	458.	132.7
21.....	427.1	409.1	396.5	381.	367.9	377.3	397.4	410.7	417.	413.9	407.	397.6	400.2	134.8
22.....	383.	365.5	347.7	333.	319.6	314.3	306.4	298.7	293.7	292.7	294.8	298.6	320.5	126.1
23.....	300.9	303.4	305.8	307.5	307.9	311.2	316.	326.5	334.2	343.1	355.	365.5	353.1	113.8
24.....	374.7	371.1	357.7	341.5	323.8	306.6	305.1	309.1	308.3	275.5	242.1	217.7	311.1	123.1
25.....	129.4	126.5	123.5	118.4	113.4	116.	136.6	146.9	148.5	137.7	127.5	117.2	128.5	94.8
26.....	106.7	*93.6	86.1	77.1	70.1	93.5	132.7	169.5	187.4	180.5	168.5	145.	125.8	97.5
Means.....	348.7	347.4	338.3	335.9	317.8	321.1	333.1	342.4	351.2	350.2	347.	343.7	339.8	
Reduced to 32° F.	128.7	134.1	133.1	137.5	126.1	121.3	117.1	114.3	119.	123.4	127.	130.4		126.5

* Three minutes late.

[1841.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

Norwanna.]

Göttingen time Observatory time	h. m. 5 57½ 0 17	h. m. 7 57½ 2 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 1 57½ 20 17	h. m. 3 57½ 22 17	Means
Nov. 1.....	59.2	59.	59.1	58.8	58.3	60.5	63.8	65.5	67.2	66.9	66.	65.7	62.5
2.....	65.	64.7	64.3	64.3	64.	64.	65.3	66.3	67.	66.	64.8	62.9	64.9
3.....	81.2	60.	58.	56.3	53.7	55.5	58.6	60.	61.	61.	59.7	58.2	58.6
4.....	57.1	56.	55.5	54.2	53.	53.	53.	52.7	51.	49.6	48.7	47.7	52.6
5.....	47.	47.	46.5	45.8	46.5	47.9	48.	49.	49.5	49.	48.7	48.	47.7
6.....	48.	47.2	46.3	48.6	45.7	46.2	48.2	49.5	50.2	49.7	47.7	47.3	47.9
7.....	44.	43.6	43.1	43.4	44.	44.4	45.6	46.	46.9	47.2	48.	48.	45.3
8.....	48.	47.5	46.6	45.7	45.5	47.	50.	51.2	51.7	51.	50.4	49.3	48.7
9.....	48.	48.3	47.5	45.3	44.7	45.	45.8	46.	46.2	46.	46.	46.	46.3
10.....	45.7	45.4	45.	44.2	44.9	44.9	46.9	48.3	49.	48.	48.	48.	46.4
11.....	47.9	48.3	48.2	48.2	48.8	49.	50.	52.	52.4	52.6	52.	51.3	50.1
12.....	50.9	50.	49.	47.7	47.1	48.	48.5	49.1	50.3	49.3	48.8	47.9	48.9
13.....	49.7	47.2	46.	45.	44.7	45.1	46.	46.	46.3	45.2	44.2	43.2	45.6
14.....	42.5	41.9	41.1	40.3	40.	41.	43.6	43.7	44.2	43.9	43.2	42.6	42.2
15.....	42.2	41.8	41.	40.5	40.8	41.	41.9	43.7	44.8	44.9	44.8	44.8	42.7
16.....	45.	45.2	45.	45.	45.	45.	45.2	46.	46.8	46.	45.8	45.7	45.5
17.....	44.7	44.7	44.	43.4	40.	39.8	39.3	39.1	39.2	39.6	40.3	40.9	41.2
18.....	41.1	41.4	41.6	41.9	42.	42.2	42.9	43.2	43.9	43.9	44.1	44.2	42.7
19.....	45.2	45.1	45.	45.	45.6	46.3	47.3	48.	48.9	50.9	52.1	54.	47.8
20.....	55.2	56.	56.	55.4	54.7	56.1	58.	58.3	57.7	56.3	55.	54.	56.1
21.....	52.8	51.9	51.	49.9	49.9	51.	52.5	53.4	53.3	52.	52.	50.9	51.7
22.....	50.	48.9	47.6	46.9	46.5	46.9	45.5	45.	45.	45.	45.1	45.8	46.4
23.....	45.9	46.	46.	45.9	46.	46.6	47.4	48.2	48.7	49.1	50.	50.5	47.5
24.....	50.9	50.	48.8	47.8	46.	45.8	46.	47.	45.8	43.7	41.	39.6	46.
25.....	34.6	34.3	34.	33.9	33.3	34.	35.7	36.	35.7	34.7	33.4	33.4	34.5
26.....	32.7	31.9	31.5	30.8	30.8	33.	35.3	38.	38.1	37.	36.	34.	34.1
Means.....	48.3	47.8	48.2	46.7	46.2	46.8	48.	48.9	49.2	48.8	48.3	47.8	47.8

Degrees Fahrenheit.

November.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

[1841.]

	h. m. 6 02½ 0 23	h. m. 8 02½ 2 23	h. m. 10 02½ 4 23	h. m. 12 02½ 6 23	h. m. 14 02½ 8 23	h. m. 16 02½ 10 23	h. m. 18 02½ 12 23	h. m. 20 02½ 14 23	h. m. 22 02½ 16 23	h. m. 0 02½ 18 23	h. m. 2 02½ 20 23	h. m. 4 02½ 22 23	Mean.
Göttingen time.....													
Observatory time.....													
Nov. 1.....	59.9	58.7	58.4	58.1	58.1	60.2	63	65.3	67	66.8	65.6	64.9	63.1
2.....	64.4	63.5	63.5	63.3	63.3	63.3	64.2	65.6	66	65	63.3	61.8	64
3.....	60.5	58.8	58.8	58.8	58.8	58.8	58.8	58.8	59	60	58.3	57.6	57.4
4.....	56.4	54.8	54.4	52.2	52.2	52.2	52	51.2	49.4	47.7	46.8	46	51.4
5.....	45.9	45	44.8	45.3	45.3	46.4	47	47.8	48.1	48	47.6	47	46.5
6.....	47.1	46.6	46.6	44.7	45	45.2	46.8	48.2	49	48.2	47.4	46	46.6
7.....	42.9	42.7	42.8	42.8	43	43.9	45.3	46	46.3	47.2	48	47.9	44.9
8.....	47.9	46.5	45.3	45.2	45.2	46	48.2	50	50	50	49.2	47	47.7
9.....	48	47.6	46.8	44.8	44.8	44.8	46.2	46.8	46	45.8	45.4	45.2	45.7
10.....	45.3	44.7	44.3	44.3	44	44.2	46	47	47	47.3	47.2	47.2	45.8
11.....	47.7	47.8	47.9	48.3	48.3	49	49.6	51.2	52.3	53	51.8	51	49.7
12.....	50.1	49.2	48.1	46.7	46.5	47	48	48.8	49	48.2	47.6	46.8	48
13.....	46.5	45.4	44.2	44	44	44.4	45	45.2	45.2	44.3	43.8	43.3	44.8
14.....	42	41	39.3	39	39	39.8	41	41.1	43	43.6	43.5	43	41.1
15.....	41.7	40.6	40	40.2	40.2	41	41.9	43	44.1	44.2	44.2	44.6	42.3
16.....	45.2	45	44.8	45	45	44.7	45	46	46	46	45.7	45.1	45.3
17.....	44.8	43.4	41.5	39.2	39	39	39	39	39	39	40.6	40.7	40.7
18.....	41.2	41.5	41.7	43	43	43	42.8	43	44	43.8	44	44.3	43.6
19.....	44.8	44.8	45	45.7	45.7	46.3	47	48	48.9	50.8	52	53.9	47.7
20.....	56.3	56	55.4	54.5	54.5	55.1	57	57.5	56.9	55.6	54.3	53.2	55.6
21.....	51	50	48.8	48	48	49	50.2	52	52	51	50.4	49.9	50.6
22.....	48.9	47.9	45.8	45.4	45.4	45	45	44.6	44.6	44.6	44.7	45	45.6
23.....	45.4	45.7	45.7	46	46	46	47	47	48.2	49	49.8	50	47.3
24.....	49.1	47.7	46.7	44.8	44.8	44	44.1	44	43	40.9	39	37.9	44.3
25.....	33.4	33.8	32.9	32.5	32.5	33	34.1	35.3	34.8	33.8	33	32.2	33.6
26.....	30.9	30.6	29.7	29.7	29.7	31.8	33.2	35.1	36	35.9	35	33.9	33.6
Mean.....	47.7	47.3	45.9	45.4	45.4	46	47.1	48.3	48.3	48	47.6	47	47.1

Deutsche Fachschriften.

NOVEMBER.]

TRIPLE OBSERVATIONS.

[1941.]

[97]

252

	Declination.			Vertical force.				Horizontal force.			
	<i>h. m.</i> 13 53½ 8 12	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 07½ 8 27	<i>h. m.</i> 13 50 8 09½	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 14 05 8 24½	Tempera- ture Fah- renheit.	<i>h. m.</i> 13 55 8 14½	<i>h. m.</i> 14 02½ 8 22	<i>h. m.</i> 14 10 8 29½	Tempera- ture Fah- renheit.
Nov. 1.....	572.2	572.	572.	511.5	541.	511.4	58.3	530.	531.1	532.	58.1
2.....	568.5	568.5	568.3	506.2	536.2	506.4	64.	548.7	544.4	545.8	63.3
3.....	567.6	568.	567.3	498.	496.2	494.3	53.7	509.5	511.	511.3	52.2
4.....	563.	565.	565.	499.4	499.2	498.	53.	551.7	547.3	552.3	52.2
5.....	562.8	562.3	565.	319.3	319.1	320.1	46.5	500.8	501.5	502.	45.3
6.....	556.	552.6	552.7	309.9	309.	308.5	45.7	505.3	502.7	509.3	45.
7.....	568.7	569.8	569.4	273.5	273.5	273.4	44.	496.8	499.1	494.9	43.
8.....	571.	570.2	569.6	307.1	306.7	306.5	45.5	495.3	498.4	501.4	45.2
9.....	568.2	568.9	568.	306.4	304.6	303.5	44.7	499.7	492.	490.7	43.7
10.....	559.4	556.6	556.	291.4	291.6	291.5	44.2	487.9	489.6	493.7	44.
11.....	561.4	561.3	559.9	347.4	347.6	347.6	48.8	500.2	497.1	496.5	48.3
12.....	556.9	556.9	557.1	337.1	336.7	336.7	47.1	498.1	495.1	497.1	46.5
13.....	566.3	565.2	556.1	296.3	297.9	297.6	44.7	485.1	487.4	487.5	44.
14.....	558.3	563.7	563.2	226.1	225.	224.7	40.	468.	469.7	470.3	39.
15.....	564.5	563.	560.7	231.8	232.1	232.5	40.8	460.7	482.	468.9	40.2
16.....	569.	560.7	562.	305.1	305.	305.7	45.	480.8	486.	487.9	45.
17.....	562.3	558.7	558.	265.6	263.1	249.	40.	515.2	514.5	515.2	39.2
18.....	545.6	546.2	541.4	252.5	258.5	254.3	42.	539.9	546.3	532.4	42.
19.....	567.1	557.7	556.4	293.	293.5	293.8	45.6	484.5	487.7	491.5	45.7
20.....	548.3	547.3	547.7	440.4	439.	438.9	54.7	515.9	521.4	529.6	54.5
21.....	550.2	547.8	547.3	367.5	367.9	366.8	49.9	522.9	519.5	515.8	45.4
22.....	560.2	560.2	561.	330.4	319.6	319.1	45.9	482.8	482.9	481.3	45.4
23.....	563.3	563.	564.7	306.6	307.9	307.6	46.	479.1	480.2	486.6	46.
24.....	561.	549.1	560.6	113.9	113.4	113.7	46.	480.6	480.6	486.6	44.8
25.....	568.8	569.8	569.4	70.1	70.1	70.1	30.8	487.8	486.7	486.6	39.5
26.....								460.8	461.6	.....	29.7

DRENNER.]

DECLINATION MAGNETOMETER.

[1841.]

Göttingen time..... Observatory time.....	h. m. 6 00 0 19½	h. m. 8 00 2 19½	h. m. 10 00 4 19½	h. m. 12 00 6 19½	h. m. 14 00 8 19½	h. m. 16 00 10 19½	h. m. 18 00 12 19½	h. m. 20 00 14 19½	h. m. 22 00 16 19½	h. m. 0 00 18 19½	h. m. 2 00 20 19½	h. m. 4 00 22 19½	Means.
Dec. 1.....	565.2	566.4	568.	568.8	570.1	570.4	567.	550.1	564.7	569.9	569.5	570.5	565.9
2.....	572.5	572.1	570.7	570.4	574.3	569.	568.3	559.9	562.	563.6	562.7	567.9	566.9
3.....	570.	568.3	563.	568.7	561.6	565.6	566.	562.	568.8	579.	569.1	566.	563.9
4.....	569.	564.6	566.1	568.1	566.2	567.	568.3	551.	555.	564.2	556.	556.	558.6
6.....	560.	562.4	561.1	564.7	564.6	562.9	566.6	568.1	558.8	561.5	560.7	562.9	562.9
7.....	563.1	561.4	560.5	560.7	560.5	563.	562.	565.1	565.1	568.9	566.8	560.9	560.1
8½.....	561.4	567.8	573.	576.2	565.5	544.7	537.9	529.	546.7	559.8	563.8	560.8	557.2
9.....	567.	563.2	547.9	564.2	560.5	547.5	544.2	547.	548.	556.	560.2	559.1	552.
10.....	569.3	548.1	561.3	567.5	539.3	562.7	550.8	552.6	564.2	562.8	560.7	561.7	553.4
11.....	561.	569.7	569.8	568.7	559.9	569.7	551.5	551.7	562.3	562.7	563.9	560.6	559.3
13.....	562.2	560.9	562.	562.8	568.4	566.8	552.5	549.	566.9	567.2	560.4	569.2	558.2
14.....	566.9	560.3	563.	564.3	563.6	569.	552.3	539.1	547.	590.7	564.4	563.5	559.5
15.....	565.4	565.8	568.3	569.1	560.2	569.2	548.5	549.7	552.	560.3	562.	562.1	568.9
16.....	563.9	561.6	564.4	568.9	570.3	561.9	553.6	565.	566.3	566.	568.8	566.9	563.5
17.....	563.3	563.	564.4	567.1	567.1	564.4	552.1	551.2	563.4	565.4	565.	567.	560.5
18.....	561.4	560.3	565.5	567.5	558.	551.4	562.5	546.4	549.7	553.	555.1	559.	555.
20.....	560.1	562.9	566.	566.2	566.8	569.2	546.6	560.9	564.5	561.	562.6	562.1	566.5
21.....	561.2	568.1	567.	568.3	567.	565.1	552.2	560.	549.6	566.	563.5	569.1	566.5
22.....	567.6	.....	563.4	568.7	568.9	565.	543.8	535.8	544.6	563.3	561.3	564.3	560.5
23.....	566.5	566.2	561.1	566.2	569.2	567.7	562.	563.	566.	568.	561.9	563.7	567.7
24.....	565.	565.6	563.8	565.3	567.8	567.6	560.	561.5	554.5	571.2	557.	560.1	559.9
25.....	565.	563.9	548.6	565.1	556.	567.	565.1	562.4	561.8	562.2	564.6	565.	567.1
27.....	561.1	561.5	562.7	567.3	562.5	561.9	563.9	547.8	567.8	567.8	561.8	567.6	568.9
28.....	567.2	568.3	566.9	569.9	561.4	567.9	562.9	564.9	567.9	566.9	561.2	569.6	567.9
29.....	566.8	566.	560.7	562.7	569.9	562.	565.	555.5	567.	561.5	563.	561.6	569.3
30.....	569.7	568.2	566.4	568.7	560.1	561.8	560.5	541.7	563.2	569.2	566.4	563.8	564.1
31.....	561.1	560.3	562.	566.4	566.8	568.5	567.6	566.3	562.5	563.7	567.2	563.1	561.3
Means	561.2	569.1	560.	561.3	569.9	568.5	560.9	560.1	565.9	562.2	564.3	561.6	564.7

[1841.]

VERTICAL FORCE MAGNETOMETER.

Decembar.]

Göttingen time... Observatory time	A. m. 5 57½ 0 17	h. m. 7 57½ 3 17	h. m. 9 57½ 4 17	h. m. 11 57½ 6 17	h. m. 13 57½ 8 17	h. m. 15 57½ 10 17	h. m. 17 57½ 12 17	h. m. 19 57½ 14 17	h. m. 21 57½ 16 17	h. m. 23 57½ 18 17	h. m. 25 57½ 20 17	h. m. 27 57½ 22 17	Means.	Reduced to 32° F.
Dec. 1.....	194.5	116.9	105.8	94.6	82.5	97.7	140.	183.5	211.4	204.1	198.5	192.5	146.8	105.
2.....	181.7	181.7	163.1	148.	140.9	159.5	196.4	208.7	219.9	223.	214.9	211.3	187.6	118.8
3.....	214.	207.8	212.7	211.8	205.8	211.7	211.5	218.2	233.1	244.5	271.4	311.3	239.6	118.9
4.....	340.2	373.5	373.8	378.	362.5	388.	411.5	415.7	417.5	410.8	394.9	378.8	389.7	137.6
5.....	237.	215.2	209.4	202.5	198.	226.5	240.1	238.	239.5	239.6	239.	236.5	226.	120.7
6.....	231.	214.2	200.7	186.8	180.	200.2	227.6	246.	261.	263.6	263.	247.7	226.8	121.5
7.....	233.	201.2	179.5	166.2	152.1	174.7	250.2	339.7	431.	425.4	416.	415.	380.	126.1
8.....	409.1	439.4	508.3	543.2	556.	593.5	611.1	624.6	623.2	634.5	630.4	616.4	565.4	152.3
9.....	601.2	597.5	627.9	635.8	638.	644.	669.8	669.4	662.	689.7	739.8	737.6	689.	166.3
10.....	716.5	702.4	707.2	712.2	706.	698.2	695.1	694.2	686.5	656.1	634.7	620.2	685.8	178.2
11.....	556.4	515.4	506.4	508.3	542.	583.5	573.5	580.7	611.4	617.4	615.5	614.4	568.7	155.6
12.....	611.7	637.1	674.2	679.1	680.3	694.3	708.	717.	723.1	718.2	709.9	701.5	687.9	164.1
13.....	704.6	704.7	683.4	650.8	643.4	649.1	650.6	711.8	720.	737.3	765.1	748.8	696.6	175.5
14.....	735.9	712.6	725.9	755.2	735.2	702.1	677.3	672.	672.	670.1	651.2	627.6	693.9	186.3
15.....	609.5	604.5	604.3	639.3	643.	663.2	660.	690.4	703.9	692.	661.7	602.2	647.9	175.4
16.....	535.2	494.6	456.	504.4	524.3	552.7	588.8	554.4	580.2	585.3	596.7	576.	544.	168.1
17.....	574.8	560.1	563.	567.8	574.3	629.6	644.	630.6	631.7	630.2	616.3	603.	602.1	178.2
18.....	566.9	563.4	607.	611.1	620.	676.5	703.1	679.1	686.5	695.8	644.3	686.7	640.	185.1
19.....	551.1	514.3	514.3	518.5	534.4	575.5	595.7	607.5	634.8	634.9	596.7	572.9	576.	172.4
20.....	533.5	484.5	484.5	460.6	493.9	548.2	594.8	626.6	654.9	680.3	649.9	627.9	572.4	175.5
21.....	603.1	638.5	706.1	703.2	717.	736.4	737.	713.4	695.2	660.8	621.5	609.	682.6	181.8
22.....	602.6	613.9	628.2	639.6	638.6	643.7	597.3	499.7	439.3	392.1	350.	314.7	536.	173.6
23.....	567.1	579.4	594.4	615.6	646.2	656.	644.4	687.7	719.7	702.	686.	657.3	646.3	172.6
24.....	675.2	674.5	667.	686.9	707.5	732.	737.	732.	713.5	715.5	734.5	683.1	698.2	183.6
25.....	697.4	704.	710.5	697.2	683.	708.1	700.4	694.6	699.7	708.9	692.	683.1	698.2	183.6
26.....	676.5	682.8	700.	722.1	699.4	664.4	711.8	693.	678.9	677.5	677.5	664.4	687.4	182.5
27.....	669.9	667.1	654.7	651.7	654.2	660.5	642.4	655.5	651.	631.7	612.2	604.8	646.3	186.
Means.....	510.1	507.5	509.7	514.4	517.5	535.9	548.1	554.6	562.3	560.2	551.2	536.2	594.1	
Reduced to 32° F.	165.9	167.9	167.4	160.7	163.	155.8	160.7	152.3	158.7	171.4	170.5	173.1		161.5

* Eight minutes late.

† Nine minutes late.

December.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

[1841.

Göttingen time.....	<i>h. m.</i> 6 57½ 0 17	<i>h. m.</i> 7 57½ 2 17	<i>h. m.</i> 9 57½ 4 17	<i>h. m.</i> 11 57½ 6 17	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 15 57½ 10 17	<i>h. m.</i> 17 57½ 12 17	<i>h. m.</i> 19 57½ 14 17	<i>h. m.</i> 21 57½ 16 17	<i>h. m.</i> 23 57½ 18 17	<i>h. m.</i> 1 57½ 20 17	<i>h. m.</i> 3 57½ 22 17	Means.
Dec. 1.....	33.5	32.9	32.	31.5	31.	33.	36.	39.	39.	38.1	38.	39.9	35.1
2.....	36.2	35.8	34.7	34.	34.	36.	38.5	39.	40.	39.	39.	38.6	37.1
3.....	38.1	38.1	37.9	37.8	37.8	38.7	39.3	40.	41.	43.3	44.8	47.	40.3
4.....	43.5	49.5	49.8	49.9	50.	50.7	53.	53.4	53.9	51.3	50.	49.8	50.5
6.....	39.1	38.8	38.4	38.	38.3	40.8	41.	41.	41.9	40.8	40.5	40.	39.8
7.....	39.4	38.4	37.7	36.8	37.	40.8	41.	41.9	42.9	42.	41.9	40.	39.8
8.....	34.	37.	36.	35.	35.	38.	41.4	41.9	42.9	42.	41.9	40.	39.8
9.....	51.4	55.4	60.	61.	61.7	65.	68.	68.5	68.1	67.	66.	64.9	43.4
10.....	65.8	64.8	67.2	66.	65.7	66.	69.3	69.3	68.1	67.	66.	64.9	62.6
11.....	71.3	70.7	71.9	71.5	71.2	70.2	70.6	71.	68.9	73.	74.5	73.7	68.5
13.....	60.1	58.	58.2	59.	63.	63.8	62.	65.1	66.1	66.	65.	65.3	62.6
14.....	65.2	68.	70.3	69.7	70.	71.	72.	73.6	75.2	72.2	71.4	71.	70.8
15.....	71.7	70.6	67.8	66.	67.3	67.8	69.	74.	73.	74.	74.5	73.4	70.5
16.....	71.	71.2	72.3	72.8	71.7	69.	68.9	68.8	69.9	68.1	66.6	65.	69.6
17.....	64.	64.	65.8	67.	68.	68.	68.5	72.	70.2	69.	66.	61.8	67.
18.....	57.7	53.9	54.4	59.	58.6	61.8	60.7	63.	64.5	62.	63.	60.	59.8
20.....	60.1	60.4	61.1	60.8	68.	66.3	66.2	68.3	65.7	65.	64.	63.8	63.4
21.....	62.	63.9	64.5	63.8	66.1	70.2	69.	68.	69.9	63.2	63.2	66.7	66.7
22.....	58.9	...	58.8	57.8	60.3	63.	63.	65.4	66.9	64.	61.9	61.	61.4
23.....	58.	57.5	53.8	55.4	57.8	62.2	64.7	66.8	66.	67.3	66.1	58.5	51.4
24.....	66.1	72.4	70.2	70.	73.1	72.2	72.	70.5	69.	65.9	64.8	64.	69.1
25.....	64.4	64.9	66.2	66.	68.2	66.	60.9	55.7	53.	49.	45.	44.	58.4
27.....	62.2	68.	63.9	65.1	67.1	67.1	66.5	73.5	71.	70.	67.7	66.1	67.1
28.....	69.4	68.	68.8	70.1	71.8	73.7	72.7	71.6	71.	71.1	72.3	69.9	70.8
29.....	69.9	71.7	70.3	69.	69.	70.5	69.	70.1	70.3	70.	68.7	69.	69.6
30.....	68.	69.9	70.5	71.9	70.	67.5	71.	69.	69.	64.	63.	67.1	69.4
31.....	63.2	63.6	67.	66.3	68.	66.9	65.	67.	66.9	64.	64.	63.	66.1
Means.....	57.5	57.9	58.1	58.3	59.	60.2	60.7	61.8	61.9	60.8	60.2	58.9	59.5

Diagrams Patentable.

[1841.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

Dresden.]

Göttingen time. Observatory time.	h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		Means.
	6 02½ 0 23	8 02½ 2 23	10 02½ 4 23	12 02½ 6 23	14 02½ 8 23	16 02½ 10 23	18 02½ 12 23	20 02½ 14 23	22 02½ 16 23	0 02½ 18 23	2 02½ 20 23	4 02½ 22 23							
Dec. 1.....	32.8	32.	31.5	30.7	30.3	31.7	34.	37.	38.3	37.8	37.	36.3							34.1
2.....	36.	35.	34.6	33.6	33.3	35.	38.	39.2	40.	39.	38.7	38.3							36.7
3.....	37.9	37.5	37.5	37.5	37.8	38.5	39.3	40.2	41.	42.7	43.	46.8							40.
4.....	49.	49.9	50.3	50.3	50.	51.	52.3	52.1	52.4	50.9	49.	48.							50.4
6.....	38.7	38.2	37.8	37.6	37.8	39.3	40.	40.2	40.2	40.1	40.	39.6							39.1
7.....	38.8	37.8	36.8	36.	35.9	37.	39.2	40.2	41.	40.4	40.	38.9							38.5
8.....	37.	36.1	35.	34.	34.	36.2	42.	47.	50.6	50.5	49.8	49.							41.8
9.....	49.3	52.	56.2	57.8	56.6	61.	63.	63.	63.	63.7	62.8	61.5							59.2
10.....	60.9	61.1	62.6	61.8	61.6	63.	64.8	65.2	65.1	67.5	69.	68.4							64.2
11.....	66.	67.5	68.2	67.8	67.5	67.	67.	66.7	65.	62.9	61.7	61.							65.9
13.....	56.8	54.6	55.1	55.7	57.	58.	57.9	60.3	60.8	61.	61.3	61.3							58.3
14.....	61.3	63.3	65.3	65.4	66.	67.	68.	67.6	68.5	67.7	68.4	66.2							68.
15.....	66.5	65.8	64.	62.3	62.6	63.	64.	67.8	65.	63.8	63.7	61.4							65.5
16.....	67.1	67.1	68.1	68.5	67.7	65.5	65.	64.5	65.	61.	58.5	54.5							61.2
17.....	60.5	60.3	61.3	62.	62.9	62.6	63.	65.	63.	61.	59.5	54.5							61.2
18.....	51.	48.3	49.	50.4	50.	51.9	51.	51.6	52.7	53.	54.	52.							51.2
20.....	56.	56.2	56.8	56.3	57.7	60.	60.5	60.4	60.6	60.3	59.5	58.6							58.6
21.....	58.4	58.1	59.8	59.6	61.	62.	62.5	62.	63.	62.	59.5	58.							60.3
22.....	54.	.....	.....	59.2	53.8	55.2	56.	58.	59.	57.9	56.	55.							55.7
23.....	53.	52.1	49.8	49.9	51.5	54.7	57.3	60.	61.7	61.8	61.3	61.							56.2
24.....	62.2	66.9	66.3	65.4	66.2	65.3	64.	63.2	61.9	59.6	58.	57.2							63.
25.....	57.8	59.	59.2	59.4	59.3	59.3	56.3	52.5	49.3	46.7	44.1	41.							53.6
27.....	53.9	55.1	56.5	57.1	59.	59.2	58.6	64.	63.4	62.5	61.	61.							59.3
28.....	62.	61.9	62.	63.	64.	65.	66.	66.4	65.2	65.	65.	63.1							64.
29.....	62.6	63.	62.7	61.9	62.	63.3	63.	63.	64.	63.2	62.3	62.4							62.8
30.....	62.	62.9	63.7	64.9	64.	64.	65.	63.2	63.	63.4	62.8	62.							63.4
31.....	62.3	61.2	61.2	60.9	61.9	61.2	60.	60.5	60.6	59.2	58.7	57.9							60.6
Means.....	53.9	53.9	54.3	54.1	54.6	55.5	56.1	57.	57.2	56.7	55.9	55.							55.4

Degrees Fahrenheit.

[1841.]

TRIPLE OBSERVATIONS.

Bismutha.]

	Declination.			Vertical force.				Horizontal force.			
	<i>h. m.</i> 13 52½ 8 12	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 07½ 8 27	<i>h. m.</i> 13 50 8 09½	<i>h. m.</i> 13 57½ 8 17	<i>h. m.</i> 14 06 8 24½	Tempera- ture Fah- renheit.	<i>h. m.</i> 13 55 8 14½	<i>h. m.</i> 14 02½ 8 22	<i>h. m.</i> 14 10 8 29½	Tempera- ture Fah- renheit.
Dec. 1.....	570.5	570.1	570.5	83.7	82.5	82.4	31.	453.2	453.9	454.	30.3
2.....	573.7	574.2	573.9	141.1	140.9	140.5	34.	472.1	471.8	476.	33.3
3.....	561.7	561.6	554.9	205.6	205.4	204.7	37.8	509.5	528.3	525.	37.8
4.....	565.7	566.2	566.5	382.4	382.5	381.2	50.	506.7	506.9	512.3	50.
5.....	565.	564.6	565.3	197.5	198.	198.9	38.3	482.9	487.4	485.6	37.8
6.....	565.8	566.5	567.	179.9	180.	180.	37.	471.6	472.1	472.3	35.8
7.....	567.7	565.5	565.1	153.5	152.1	151.4	35.	479.1	476.9	478.	34.
8.....	563.2	560.5	547.4	633.3	633.	632.7	61.7	523.6	527.5	525.4	58.6
9.....	542.8	539.3	539.6	633.3	633.	632.7	65.7	567.1	564.	558.3	61.5
10.....	559.9	559.9	560.2	706.6	706.	705.9	71.2	562.4	560.2	562.	67.5
11.....	568.8	568.4	559.1	538.5	542.	545.8	63.	507.1	512.2	508.3	57.
12.....	562.6	563.6	562.5	679.5	680.3	682.4	70.	553.2	558.	556.1	66.
13.....	560.1	560.2	560.6	642.8	643.4	644.4	67.3	558.8	559.2	561.1	62.6
14.....	570.	570.3	569.5	735.7	735.3	734.8	71.7	566.7	565.1	567.3	67.7
15.....	560.3	557.1	558.4	641.	643.	646.8	68.	545.	544.4	543.9	62.8
16.....	557.6	558.	557.	524.8	524.3	523.4	58.6	504.5	503.6	504.5	50.
17.....	563.	555.8	557.5	571.8	576.5	574.3	59.	527.4	523.6	522.2	57.7
18.....	557.3	557.	556.9	620.2	620.	624.6	66.1	528.6	530.2	529.7	61.
19.....	562.8	553.9	554.2	533.8	534.4	536.2	60.3	491.6	498.4	498.7	53.8
20.....	559.2	559.2	559.2	493.9	493.9	493.9	57.8	.....	509.8	.....	51.5
21.....	557.8	557.8	537.1	715.2	717.	718.4	72.1	.....	547.9	552.3	66.2
22.....	555.5	556.	556.9	637.5	638.6	638.8	66.2	537.9	538.4	538.4	59.3
23.....	561.7	562.5	562.8	644.9	646.2	647.9	67.8	.....	533.6	534.3	59.
24.....	561.1	561.4	561.	705.6	707.5	708.8	71.8	551.6	550.3	551.4	64.
25.....	559.2	559.9	559.8	683.2	683.	683.3	69.	544.5	544.9	545.1	62.
26.....	550.1	550.1	547.7	717.1	699.4	714.5	70.	.....	573.8	573.5	64.
27.....	555.4	556.8	557.7	632.	654.2	655.	68.	570.6	571.3	571.6	61.9

MAGNETIC OBSERVATORY

AT THE

GIRARD COLLEGE, PHILADELPHIA.

TERM DAY MAGNETIC OBSERVATIONS,

FROM JANUARY TO JUNE, 1841.

GENERAL NOTE.

The condition of the instruments has been described in the general notes to the ordinary observations.

JANUARY 30, 21.] MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER. [1841.]

Göttingen time...	h.	a.	a.	h.	h.	a.	a.	h.	h.	a.	a.	h.	h.	a.	a.	h.	h.	Observatory time.
m.	0	570.3	578.4	577.6	579.1	587.8	582.3	584.8	578.4	578.4	579.8	580.4	578.9	578.9	578.9	578.9	578.9	m. 19 30
5	568.9	577.7	577.6	579.5	580.8	580.8	584.2	583.5	577.7	578.2	579.8	580.4	579.1	579.1	579.1	579.1	579.1	5
10	570.	577.9	578.	580.8	582.3	582.3	588.	582.9	578.2	578.2	579.7	580.2	579.	579.	579.	579.	579.	10
15	574.2	577.8	578.8	581.3	581.4	581.4	591.2	580.5	579.	579.	579.6	580.4	579.	579.	579.	579.	579.	15
20	579.6	577.5	578.8	582.1	581.5	581.5	595.5	579.	579.	579.	580.	581.	578.9	578.9	578.9	578.9	578.9	20
25	581.	576.8	580.	583.4	581.	581.	597.	578.	578.9	578.6	580.5	581.	579.	579.	579.	579.	579.	25
30	580.	576.6	580.3	584.	580.9	580.9	595.1	577.9	578.	578.1	580.3	581.	579.	579.	579.	579.	579.	30
35	579.5	575.7	580.2	583.7	580.5	580.5	592.7	577.9	578.5	578.3	580.4	581.2	579.1	579.1	579.1	579.1	579.1	35
40	579.6	576.	580.	583.8	581.	581.	587.8	578.1	578.2	578.9	580.8	580.9	579.2	579.2	579.2	579.2	579.2	40
45	578.6	576.3	580.	584.2	581.1	581.1	585.3	578.9	578.2	578.2	581.	580.1	579.9	579.9	579.9	579.9	579.9	45
50	578.1	576.7	579.8	580.8	581.5	581.5	585.6	578.2	578.6	577.8	580.9	579.7	580.	580.	580.	580.	580.	50
55	578.7	576.8	579.4	580.5	582.	582.	585.7	579.	578.8	578.7	580.8	578.9	579.9	579.9	579.9	579.9	579.9	55

Göttingen time...	h.	a.	a.	h.	h.	a.	a.	h.	h.	a.	a.	h.	h.	a.	a.	h.	h.	Observatory time.
m.	0	580.1	580.2	580.2	582.9	583.2	587.	584.8	583.	576.	568.7	566.8	561.1	561.1	561.1	561.1	561.1	m. 19 30
5	579.9	580.	580.	582.9	585.2	585.2	586.5	585.6	583.2	574.6	568.8	566.	561.6	561.6	561.6	561.6	561.6	5
10	579.3	580.	580.9	582.9	585.6	585.6	586.3	587.4	582.4	574.2	569.4	566.5	562.5	562.5	562.5	562.5	562.5	10
15	580.2	579.7	581.	582.9	584.6	584.6	587.6	585.	583.	572.6	570.1	566.1	565.7	565.7	565.7	565.7	565.7	15
20	579.6	579.9	580.8	583.9	584.7	584.7	588.8	585.	583.6	571.2	571.	567.	568.8	568.8	568.8	568.8	568.8	20
25	579.4	580.	581.5	584.	586.3	586.3	585.4	585.2	582.4	570.6	567.7	567.3	569.6	569.6	569.6	569.6	569.6	25
30	579.7	579.7	581.1	584.	587.2	587.2	586.7	584.7	581.7	569.7	567.6	567.	568.	568.	568.	568.	568.	30
35	580.	580.	581.5	584.	587.	587.	586.3	583.7	581.2	569.7	570.4	565.	571.4	571.4	571.4	571.4	571.4	35
40	579.5	579.8	581.7	584.	587.	587.	586.6	583.2	580.	569.7	569.9	564.1	571.	571.	571.	571.	571.	40
45	579.5	580.	581.9	584.8	586.8	586.8	587.	583.3	579.1	569.7	570.1	560.7	570.8	570.8	570.8	570.8	570.8	45
50	579.9	580.3	583.8	584.7	587.1	587.1	586.7	582.2	577.7	570.2	569.7	558.1	570.7	570.7	570.7	570.7	570.7	50
55	580.1	580.2	582.4	584.7	586.5	586.5	585.8	583.	577.3	570.6	567.9	559.8	573.	573.	573.	573.	573.	55

[1841.

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

JANUARY 30, 31.]

Göttingen time.....	h. 23 17	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time.
m. s.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	m.
3 30.....	952.2	924.1	938.9	936.7	946.9	945.7	942.	932.3	931.3	934.	935.4	936.5	.....
13 30.....	962.	926.7	936.6	936.1	944.9	949.	930.	930.2	932.2	932.3	935.7	935.8	.....
23 30.....	944.8	929.4	935.7	937.	938.9	951.6	932.4	936.5	932.5	936.	936.	935.7	.....
33 30.....	934.4	932.5	933.1	935.	943.3	939.8	932.	940.2	933.2	934.	938.3	932.9	.....
43 30.....	.....	936.5	934.4	934.3	946.4	939.7	934.3	933.7	930.9	935.8	939.6	934.3	.....
53 30.....	922.8	939.8	925.8	947.6	945.9	938.6	932.	930.3	928.1	937.9	934.5	934.9	.....
Thermometer.....	28.	28.4	29.2	29.5	29.7	30.4	30.8	31.	31.9	.....	32.5	33.	Thermometer.

Göttingen time.....	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time.
m. s.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	m.
3 30.....	933.9	931.1	927.4	920.3	918.7	929.3	938.4	956.7	970.9	969.6	936.6	965.6	.....
13 30.....	933.9	930.7	.....	917.9	919.5	929.7	945.	963.3	972.8	974.5	939.7	998.9	.....
23 30.....	933.9	929.9	923.2	914.3	926.	932.1	942.5	962.8	979.5	945.4	934.7	966.8	.....
33 30.....	933.9	928.6	921.3	913.5	928.3	931.	950.7	964.6	980.	950.7	936.4	969.5	.....
43 30.....	934.	927.3	920.8	913.9	931.	934.8	951.4	968.2	969.7	947.	968.7	945.6	.....
53 30.....	932.6	927.5	920.3	915.9	939.	938.3	956.2	971.6	963.	934.3	936.5	945.1	.....
Thermometer.....	33.1	33.2	33.9	34.3	35.	35.5	36.	36.2	36.8	37.	37.1	Thermometer.

FEBRUARY 26, 27.]

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

[1841.

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Göttingen time....	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3...	Observatory time.
<i>m.</i> <i>s.</i>												<i>m.</i>
2 30.....	1155.6	1165.4	1165.3	1213.7	1198.2	1195.4	1177.8	1183.1	1191.4	1168.7	1177.8	.....22
12 30.....	1150.8	1168.3	1162.2	1201.3	1189.1	1204.2	1178.5	1178.2	1190.8	1165.	1173.5	.....32
22 30.....	1156.3	1173.6	1180.9	1208.9	1212.7	1207.9	1188.7	1167.1	1192.9	1167.	1153.7	.....42
32 30.....	1166.2	1179.2	1193.1	1213.9	1231.5	1182.5	1181.6	.....	1177.8	1171.1	1152.	.....52
42 30.....	1165.	1195.9	1194.	1211.7	1219.	1180.3	1183.3	1172.2	1163.8	1165.5	1151.2	.....2
52 30.....	1169.6	1221.9	1220.9	1202.3	1214.8	1181.4	1185.1	1180.1	1170.1	1165.	1146.112
Thermometer.....	45.7	45.5	46.	45.8	46.	46.	45.7	45.8	45.7	45.7	45.5	Thermometer.

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Göttingen time....	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15...	Observatory time.
<i>m.</i> <i>s.</i>													<i>m.</i>
2 30.....	1153.2	1158.1	1158.1	1144.6	1154.4	1161.1	1165.1	1189.3	1180.1	1177.6	1179.4	1160.3	.....22
12 30.....	1154.8	1156.2	1154.3	1147.6	1153.1	1165.9	1170.4	1197.2	1181.5	1164.8	1176.4	1158.	.....32
22 30.....	1157.3	1157.9	1154.9	1146.8	1155.9	1157.7	1175.6	1190.1	1175.	1172.9	1164.4	1156.9	.....42
32 30.....	1155.	1158.2	1153.	1146.3	1154.4	1156.1	1181.2	1190.2	1175.2	1181.3	1159.3	1151.6	.....52
42 30.....	1157.7	1161.6	1150.6	1147.4	1156.4	1156.9	1181.	1185.3	1178.1	1177.3	1167.6	1161.6	.....2
52 30.....	1159.	1159.2	1149.2	1151.3	1157.2	1162.2	1169.2	1187.4	1181.2	1177.9	1155.9	1147.9	.....12
Thermometer.....	45.2	45.2	45.3	45.5	45.5	46.	46.	46.3	46.5	46.7	47.	47.5	Thermometer.

[1841

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

MARCH 24, 26.]

Göttingen time.....	h. 23 16	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time.
m. 30.....	1204.1	1203.1	1234.7	1199.	1260.8	1244.1	1219.2	1215.7	1205.2	1190.3	1179.6	1193.1	m. .....22
12 30.....	.....	1222.9	1234.9	1224.7	1275.3	1239.8	1235.8	1196.6	1201.6	1180.7	1180.9	1196.9	.....32
12 30.....	1217.2	1227.4	1232.8	1266.2	1278.	1234.5	1220.5	1195.2	1202.8	1189.7	1178.6	1197.7	.....42
22 30.....	1209.9	1255.4	1232.4	1283.	1264.	1233.1	1224.5	1193.3	1201.1	1198.	1177.1	1191.2	.....52
32 30.....	.....	.....	.....	.....	.....	.....	1220.6	1199.2	1193.	1190.2	1179.9	1189.3	.....2
42 30.....	1199.2	1261.4	1183.6	1276.7	1273.1	1229.3	1223.3	1203.6	1184.	1185.2	1187.7	1184.4	.....12
52 30.....	1208.2	1245.5	1190.2	1277.2	1265.2	1220.5	.....	.....	.....	.....	.....	.....	.....
Thermometer.....	55.	55.1	56.	56.	55.8	55.4	55.	54.	54.	53.1	52.6	52.	Thermometer.
Göttingen time.....	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time.
m. 30.....	1176.3	1166.	1179.1	1178.3	1186.7	1184.8	1200.7	1213.3	1212.7	1201.3	1184.9	1193.6	m. .....22
12 30.....	1176.9	1169.4	1178.3	1182.	1184.6	1191.5	1205.7	1214.	1210.	1200.4	1181.5	1191.8	.....32
22 30.....	1184.9	1170.6	1179.8	1182.7	1188.9	1191.6	1208.2	1214.7	1210.4	1196.6	1178.	1198.5	.....42
32 30.....	1184.3	.....	1177.1	1192.2	1186.2	1193.2	1208.9	1213.9	1209.	1194.3	1189.5	1199.5	.....52
42 30.....	1173.7	1177.6	1179.8	1194.1	1182.1	1195.9	1211.	1214.	1210.3	1195.	1195.4	1200.4	.....2
52 30.....	1172.9	1178.2	1174.4	1188.8	1183.3	1198.4	1210.5	1212.9	1206.1	1189.	1186.4	1202.	.....12
Thermometer.....	51.	50.7	50.	50.	50.	50.9	51.5	52.5	53.5	55.	56.7	58.	Thermometer.

[1841.]

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

MARCH 24, 25.]

Göttingen time.....	<i>h.</i> 23 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3...	Observatory time. <i>m.</i>
<i>m.</i> 7 30.....	828.3	842.6	855.6	876.8	872.5	875.3	871.8	863.	862.4	861.5	853.1	845.6	.....27
17 30.....	830.4	844.5	858.6	876.6	873.4	878.5	870.7	865.7	860.7	860.6	851.6	843.8	.....27
27 30.....	833.8	845.5	860.4	874.5	871.	873.	869.5	865.5	861.4	861.3	850.3	843.1	.....47
37 30.....	837.4	845.5	863.8	873.1	872.2	872.6	867.4	867.3	860.7	860.7	850.5	841.7	.....57
47 30.....	838.9	848.1	873.2	872.	872.3	873.	866.5	867.6	862.1	858.2	850.5	839.1	.....7
57 30.....	841.	850.8	875.8	871.	872.3	874.3	863.5	864.6	862.7	855.6	849.9	837.4	.....17
Thermometer.....	55.	56.	56.3	56.3	56.	55.4	55.1	54.	54.1	53.8	53.	52.4	...Thermometer.

Göttingen time.....	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15...	Observatory time. <i>m.</i>
<i>m.</i> 7 30.....	834.6	821.7	811.8	806.3	802.8	804.8	816.3	830.6	845.7	862.2	883.5	899.4	.....27
17 30.....	834.3	820.2	809.9	805.1	802.5	806.7	818.9	833.2	848.	865.3	886.6	902.1	.....37
27 30.....	832.8	818.1	808.9	804.5	803.	808.5	821.2	835.6	850.4	868.4	888.7	905.	.....47
37 30.....	831.	818.1	809.	804.1	803.4	810.1	823.5	838.4	856.	872.3	891.3	907.3	.....57
47 30.....	828.5	816.1	808.	803.7	803.9	812.	825.9	840.6	856.1	877.	894.9	908.8	.....7
57 30.....	825.1	813.9	806.9	803.2	803.9	814.1	827.7	843.3	858.8	879.7	896.8	911.9	.....17
Thermometer.....	51.4	51.	50.5	50.4	50.8	51.5	52.5	54.	55.	56.7	58.	59.	...Thermometer.

[1841.

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

April 21, 22.]

Göttingen time	<i>h.</i> 22 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i> 2 30	1173.6	1191.3	1186.3	1201.6	1201.4	1162.8	1159.9	1184.2	1180.7	1174.6	1181.	1183.	<i>m.</i> 22
12 30	1163.2	1180.7	1187.9	1203.2	1201.8	1184.8	1166.	1184.4	1181.7	1182.7	1180.3	1182.2	..... 32
22 30	1153.5	1167.3	1196.	1209.7	1197.8	1180.2	1170.3	1180.8	1173.3	1192.2	1179.5	1159.4	..... 42
32 30	1155.4	1188.1	1192.8	1217.5	1195.2	1168.1	1189.9	1173.3	1160.8	1190.6	1179.3	1158.3	..... 52
42 30	1187.8	1199.	1191.7	1217.3	1201.3	1149.	1182.4	1171.6	1163.4	1188.4	1176.5	1158.6	..... 2
52 30	1192.1	1178.7	1198.8	1206.8	1154.6	1155.	1181.8	1178.3	1166.7	1184.	1166.5	1158.1	..... 12
Thermometer	56.	56.	55.	54.	53.6	53.	51.7	51.2	51.4	50.	49.5	49.4	Thermometer.
Göttingen time	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i> 2 30	1163.1	1153.3	1162.3	1187.6	1187.2	1200.8	1211.1	1239.5	1204.2	.....	1175.9	1157.5	<i>m.</i> 22
12 30	1160.7	1153.2	1161.5	1193.9	1190.2	1204.1	1221.	1236.2	1202.	1197.5	1177.1	1160.4	..... 32
22 30	1164.2	1155.4	1162.9	1197.7	1186.	1205.4	1216.2	1223.8	1204.3	1194.6	1195.8	1166.6	..... 42
32 30	1159.5	1157.	1165.3	1195.2	1189.9	1210.	1218.1	1222.4	1212.1	1180.	1181.3	1167.	..... 52
42 30	1156.	1157.6	1169.6	1186.3	1194.4	1211.4	1222.6	1214.1	1208.4	1189.6	1188.9	1167.8	..... 2
52 30	1153.9	1161.4	1178.	1186.1	1198.8	1214.9	1229.8	1208.3	1200.5	1170.6	1182.7	1175.8	..... 12
Thermometer	49.8	49.4	48.	48.8	50.	50.	50.1	50.3	50.7	51.	51.	51.	Thermometer.

[1841.]

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

APRIL 21, 82.]

Göttingen time.....	<i>h.</i> 23 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i> 7 30.....	905.	903.2	899.	894.	886.3	886.2	880.8	886.	868.3	851.6	843.1	843.	<i>m.</i> .....27
17 30.....	904.3	901.7	896.1	892.2	885.2	885.5	878.	863.3	855.5	850.	843.4	842.4	.....37
27 30.....	902.1	900.	897.9	891.	884.7	890.1	875.7	861.5	854.8	848.5	843.3	841.6	.....47
37 30.....	901.6	900.2	896.8	888.9	883.5	889.6	873.2	861.9	854.2	847.	844.5	840.5	.....57
47 30.....	901.7	900.2	896.2	888.2	884.7	887.4	870.9	860.4	854.	845.7	844.8	839.2	.....7
57 30.....	903.5	899.3	895.5	888.1	886.5	883.3	868.7	860.7	852.5	845.5	844.5	837.1	.....17
Thermometer.....	56.	55.5	54.7	54.	54.	53.3	52.1	52.	52.6	52.	51.	50.4	...Thermometer.
Göttingen time.....	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i> 7 30.....	835.3	823.4	820.4	815.5	819.3	826.7	830.2	823.1	835.	839.1	836.	836.1	<i>m.</i> .....27
17 30.....	832.	823.8	818.9	815.5	820.2	826.9	830.7	824.	835.5	838.1	836.7	835.5	.....37
27 30.....	829.4	821.8	817.8	815.8	821.5	828.	831.	824.2	836.	838.	836.9	835.6	.....47
37 30.....	827.1	820.9	817.8	815.5	822.9	828.9	831.	825.	836.7	837.5	837.4	834.3	.....57
47 30.....	826.4	820.	816.6	817.	824.2	829.4	833.3	825.	837.4	836.9	836.9	834.7	.....7
57 30.....	824.9	819.6	815.8	818.	824.6	830.1	832.6	824.9	838.3	836.5	836.7	835.4	.....17
Thermometer.....	50.	49.8	49.7	49.3	50.6	50.6	50.7	51.	51.6	51.8	51.5	51.5	...Thermometer.

[184].

MAGNETIC TERM DAY--VERTICAL FORCE MAGNETOMETER.*

May 28, 29.]

[illegible]

* See general notes to the ordinary observations.

June 23, 24.]

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

[1841.]

Göttingen time	<i>h.</i> 22 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i>													<i>m.</i> 19 30
0	557.	558.9	571.2	569.7	566.3	571.2	573.1	574.4	577.5	565.	551.1	560.8	.....
5	558.1	569.5	574.1	569.4	566.1	572.7	574.3	574.1	578.6	563.2	551.5	561.2	.....
10	558.6	559.9	575.4	568.8	566.5	573.4	573.3	571.5	577.7	562.4	551.7	560.7	.....
15	560.9	561.1	574.4	569.	566.	574.4	574.	570.2	575.1	563.2	553.7	560.3	.....
20	561.4	563.2	573.4	569.9	566.4	574.2	579.5	571.3	574.7	563.5	554.8	560.	.....
25	560.5	565.1	574.	569.5	566.1	574.4	580.5	570.8	574.3	565.	554.	560.3	.....
30	560.8	564.7	574.	566.8	566.4	572.8	581.5	570.7	575.	564.5	553.7	561.7	.....
35	562.2	565.	573.9	568.	567.6	572.	581.1	570.5	573.	565.	555.2	562.9	.....
40	563.5	566.	573.1	566.9	567.9	572.4	581.1	571.8	569.9	562.1	556.7	562.6	.....
45	562.1	567.4	571.1	566.	568.	571.3	578.9	573.	567.8	568.5	557.1	564.7	.....
50	560.6	568.4	569.7	565.9	568.4	571.8	576.7	575.6	*566.3	564.7	559.4	566.3	.....
55	559.5	569.6	570.	565.6	569.4	572.7	575.3	575.8	566.1	562.3	561.8	568.2	.....
Göttingen time	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i>													<i>m.</i> 19 30
0	568.8	564.1	569.6	580.6	580.	578.7	569.8	561.5	560.4	558.9	557.5	560.7	.....
5	569.9	562.6	571.6	580.7	579.6	576.	567.7	562.8	569.5	557.4	557.5	560.3	.....
10	570.	560.5	572.	580.5	579.5	577.	565.9	561.9	559.	558.3	557.2	560.3	.....
15	569.7	559.8	572.5	581.	579.9	576.5	564.8	560.	559.4	558.9	557.5	560.5	.....
20	570.1	560.8	573.6	580.5	580.4	574.3	563.5	560.3	559.8	558.5	558.	560.8	.....
25	568.8	561.8	574.1	581.3	580.	574.	565.6	562.7	559.4	558.	558.3	560.9	.....
30	566.9	567.8	574.1	581.6	578.5	573.2	565.1	561.3	560.7	556.2	558.7	561.	.....
35	567.6	568.6	575.7	581.	577.3	571.6	563.7	561.2	560.5	558.1	558.9	561.5	.....
40	568.	568.6	576.8	582.7	576.5	571.3	563.	560.1	560.5	557.5	560.4	561.5	.....
45	566.	567.4	579.5	580.3	576.1	568.7	561.7	560.5	560.4	557.1	559.8	561.3	.....
50	566.5	568.1	581.	580.1	577.	569.7	561.5	560.4	560.	557.3	559.8	561.7	.....
55	565.	569.2	580.9	579.7	579.	570.	562.9	561.	559.4	558.3	560.2	561.8	.....

* Recorded 576.3.

[1841.]

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.*

JUNE 23, 24.]

Göttingen time.....	h.		h.		h.		h.		h.		h.		h.		h.		h.		h.		Observatory time.
	m.	s.	h.	0	1	h.	2	3	h.	4	5	6	7	8	9	h.	0	1	2	3	
2 30.....	413.5	416.3	439.7	444.7	444.7	444.7	444.7	445.2	445.2	427.9	425.1	437.1	416.8	414.7	413.3	413.3	425.1	416.8	414.7	413.3	m.
12 30.....	416.	424.2	424.1	448.3	448.3	448.3	448.3	445.7	445.7	431.9	429.5	436.3	414.7	414.3	412.9	412.9	429.5	414.7	414.3	412.9	.....22
22 30.....	409.	406.9	422.8	439.7	445.2	445.2	445.2	439.2	439.2	412.5	429.3	436.1	413.4	409.8	414.9	414.9	429.3	413.4	409.8	414.9	.....32
32 30.....	405.8	417.1	420.	433.2	438.6	438.6	438.6	433.3	433.3	402.2	431.4	411.4	412.1	410.1	413.3	413.3	431.4	412.1	410.1	413.3	.....42
42 30.....	396.4	418.7	432.9	440.	440.6	440.6	440.6	435.2	435.2	409.7	428.	420.	411.3	411.9	412.5	412.5	428.	411.3	411.9	412.5	.....52
52 30.....	404.4	427.2	439.5	442.9	441.3	441.3	441.3	436.1	436.1	414.	429.3	412.4	411.7	412.	413.6	413.6	429.3	411.7	412.	413.6	.....12
Thermometer.....	80.2	81.7	81.6	81.5	80.7	80.	79.6	79.	78.3	77.8	76.8	Thermometer.									
Göttingen time.....	h.	10	11	12	13	14	15	16	17	18	19	20	21	21	15...	h.	18	19	20	21	Observatory time.
2 30.....	413.3	435.	407.6	401.7	416.3	439.5	457.3	451.2	445.1	436.6	439.4	438.3	439.4	439.4	439.4	439.4	436.6	438.3	439.4	439.4	m.
12 30.....	409.3	441.3	405.7	404.	426.7	441.4	467.1	447.2	450.1	442.6	440.5	439.	440.5	440.5	440.5	440.5	442.6	442.6	439.	440.5	.....22
22 30.....	410.1	432.5	405.2	412.1	426.	449.2	468.2	447.9	442.8	435.6	432.9	432.9	440.5	440.5	440.5	440.5	435.6	432.9	432.9	440.5	.....32
32 30.....	412.5	417.5	406.7	410.3	424.3	449.8	458.7	452.	443.3	437.	437.8	437.8	440.1	440.1	440.1	440.1	437.	437.8	437.8	440.1	.....42
42 30.....	419.1	413.7	406.	404.9	432.	447.3	459.5	450.1	431.6	438.7	436.1	444.	436.1	436.1	436.1	436.1	438.7	444.	444.	436.1	.....52
52 30.....	426.9	412.1	408.7	414.7	437.	451.6	461.3	446.2	434.8	435.5	435.	440.	435.	435.	435.	435.	435.5	440.	440.	435.	.....12
Thermometer.....	76.5	76.	76.3	76.6	77.	.....	79.	80.	81.1	82.3	83.	83.6	85.	85.	85.	85.	83.6	83.6	83.6	85.	Thermometer.

† One minute late.

* See general notes to the ordinary observations.

June 23, 24.]

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.*

[1841.]

Göttingen time.....	h. 23 16	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3...	Observatory time.
Thermometer.....	79.3	81.	81.	80.6	79.9	79.5	79.	78.8	78.3	78.1	77.9	77.1	Thermometer.
Göttingen time.....	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15...	Observatory time.
Thermometer.....	76.9	76.6	76.4	76.8	77.	77.8	78.5	80.	81.	82.2	83.	84.	Thermometer.

h. 23 16	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3...	Observatory time.
773.8	797.5	813.5	818.8	816.3	811.8	807.6	809.6	805.7	801.5	801.	789.8	77.
776.7	800.8	815.	819.	815.2	811.3	808.6	807.3	804.5	800.9	800.8	786.7	27
780.8	803.1	816.4	818.1	814.5	810.8	811.7	806.	804.4	799.9	798.9	784.4	37
784.1	805.4	816.4	817.8	813.5	810.3	813.9	805.1	805.6	799.7	797.	783.9	47
787.8	807.7	817.4	817.7	812.9	808.7	813.2	806.1	804.	797.9	794.6	780.5	57
792.	810.7	818.6	817.1	812.4	807.8	811.7	807.	803.3	799.5	793.2	778.2	7
												17

h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15...	Observatory time.
777.6	770.3	770.1	770.	773.1	778.	784.2	801.7	818.3	834.1	847.	860.1	77.
776.	769.4	770.3	770.	774.9	778.2	787.	805.	822.4	836.5	849.	862.1	27
774.4	769.5	770.1	770.	775.	779.4	790.5	807.7	825.1	838.5	851.	864.	37
774.6	767.8	770.6	771.	775.5	780.7	792.8	810.4	827.9.	840.	853.4	867.	47
772.5	768.	771.	771.8	772.1	781.3	796.	813.4	829.9	842.3	855.7	869.1	57
771.8	769.6	770.	772.7	777.6	783.	799.	815.4	831.9	844.8	857.9	869.9	7
												17

* See general notes to the ordinary observations.

MAGNETIC OBSERVATORY

AT THE

GIRARD COLLEGE, PHILADELPHIA.

TERM DAY MAGNETIC OBSERVATIONS,

FROM JULY TO DECEMBER, 1841.

Göttingen time.....	h. 23 16	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3...	Observatory time.
	m. 23 16	m. 23 17	m. 0 18	m. 1 19	m. 2 20	m. 3 21	m. 4 22	m. 5 23	m. 6 0	m. 7 1	m. 8 2	m. 9 3...	m.
2 30.....	460.7	476.7	484.1	481.8	479.3	461.	467.6	492.9	500.	500.5	467.4	491.5	.....22
12 30.....	462.9	478.7	483.3	484.7	474.5	470.6	482.8	498.9	500.6	500.7	466.5	487.5	.....32
22 30.....	457.5	477.	482.	481.8	478.8	467.9	487.9	509.2	496.5	484.5	466.1	472.4	.....42
32 30.....	460.1	481.9	484.3	479.5	480.3	458.8	489.	505.5	500.5	478.6	466.3	462.	.....52
42 30.....	463.8	481.	484.3	483.2	480.9	454.2	487.9	512.	485.3	485.5	475.8	452.8	.....2
52 30.....	473.3	486.2	481.5	483.	467.9	452.3	488.8	501.3	490.4	471.8	486.2	456.2	.....12
Thermometer.....	81.5	82.3	84.	81.6	80.2	79.2	73.	77.2	76.2	75.3	75.4	75.1	...Thermometer.
Göttingen time.....	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15...	Observatory time.
2 30.....	460.4	464.9	469.9	466.	495.3	503.5	497.8	499.2	489.7	479.4	464.7	467.6	.....22
12 30.....	468.1	461.	472.4	484.7	498.1	503.	500.	498.1	490.	473.2	464.3	468.3	.....32
22 30.....	466.3	462.8	474.	485.7	498.4	501.8	499.	490.6	480.	472.4	461.6	467.	.....42
32 30.....	466.3	464.6	475.6	489.	504.	505.3	499.3	491.2	478.2	472.3	460.3	474.1	.....52
42 30.....	467.8	466.4	479.1	492.	504.4	505.2	501.	493.3	479.4	466.7	463.3	479.5	.....2
52 30.....	466.9	466.7	483.	494.2	505.1	497.6	499.3	493.4	477.5	466.6	466.3	479.3	.....12
Thermometer.....	75.	74.4	74.4	74.8	76.3	77.5	79.	80.2	81.3	83.6	83.3	85.	...Thermometer.

[1901.]

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

JAN 31, 20.]

Göttingen time.....	h. 23 16	h. 23 17	h. 9 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time.
m. 7 30.....	858.	867.6	875.6	874.4	865.7	859.	854.3	843.6	831.5	821.5	809.7	803.3	m. .....37
17 30.....	869.4	869.3	876.7	873.5	862.	859.8	851.6	841.6	833.6	820.4	808.5	804.9	.....37
27 30.....	860.5	870.6	877.1	871.8	861.	860.5	850.5	839.4	830.	821.8	808.9	807.9	.....47
37 30.....	861.8	872.	877.1	870.6	859.9	857.4	848.8	837.	827.9	821.3	806.6	806.5	.....57
47 30.....	863.7	873.7	876.5	867.7	857.1	856.7	846.	836.6	826.3	818.5	806.3	803.8	.....7
57 30.....	866.	874.9	875.8	866.3	856.3	857.	844.1	835.4	823.3	813.	804.9	801.8	.....17
Thermometer.....	81.5°	82.	81.9	81.	80.	78.9	78.1	83.2	77.	.....	76.	75.9	..Thermometer.

Göttingen time.....	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time.
m. 7 30.....	797.2	780.3	776.9	777.9	785.5	796.	811.2	826.3	844.8	860.5	892.3	903.2	m. .....37
17 30.....	796.1	779.6	776.5	779.1	786.5	798.6	818.6	838.8	846.3	856.4	884.6	894.4	.....37
27 30.....	790.9	778.1	776.5	780.5	789.3	802.	816.3	831.1	848.9	857.9	886.5	894.7	.....47
37 30.....	787.4	777.8	776.4	782.	790.	803.7	819.1	838.6	851.6	871.1	888.5	898.6	.....57
47 30.....	784.5	777.1	776.3	783.1	792.1	807.2	821.9	837.8	853.9	872.2	888.4	902.9	.....7
57 30.....	782.6	777.3	777.	784.3	794.	809.	823.7	841.5	857.3	880.	877.	905.3	.....17
Thermometer.....	76.	75.2	75.3	75.6	76.5	77.6	78.8	80.	81.	82.3	84.	84.	..Thermometer.

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

August 27, 28.]

[184].

[illegible][illegible]

[1841.]

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

Aveur 27, 28.]

Göttingen time.....	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time.
m. s.	550.3	518.1	568.9	505.4	519.	514.9	525.4	516.3	523.1	522.2	520.4	m.
2 30.....	496.8	523.	545.8	510.8	522.4	515.1	524.4	524.5	520.9	520.6	516.5	..... 22
12 30.....	499.3	541.3	529.	517.	520.2	.....	499.6	514.2	530.3	518.6	515.7	..... 32
22 30.....	507.7	540.	486.7	517.	520.2	.....	499.6	514.2	530.3	518.6	515.7	..... 42
32 30.....	512.4	534.5	492.	524.2	511.3	524.1	486.9	517.6	527.4	520.3	517.5	..... 52
42 30.....	518.6	531.3	545.9	525.7	509.7	523.6	476.	526.5	527.7	514.7	526.4	..... 2
52 30.....	548.9	528.3	505.3	525.2	512.	516.4	496.2	531.2	522.2	513.4	526.8	..... 12
Thermometer.....	74.9	76.	76.	76.	76.	76.	76.	76.	75.9	76.3	76.1	Thermometer.

Göttingen time.....	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time.
m. s.	579.5	512.6	516.4	553.3	569.1	564.3	557.8	563.6	559.1	516.5	528.7	m.
2 30.....	521.8	522.1	514.	554.8	569.7	555.6	561.2	554.9	548.2	516.5	519.3	..... 22
12 30.....	526.5	500.	522.3	550.2	565.4	549.4	569.	554.3	554.4	516.5	519.3	..... 32
22 30.....	539.2	511.8	526.7	553.8	554.7	557.3	560.	561.	525.7	523.7	513.9	..... 42
32 30.....	535.	545.7	522.1	555.9	560.6	561.	561.7	568.6	529.1	522.6	519.6	..... 52
42 30.....	545.7	500.	531.8	573.5	570.	565.3	569.6	572.	530.4	553.5	523.	..... 2
52 30.....	568.2	516.1	531.8	573.5	570.	565.3	569.6	572.	530.4	553.5	523.	..... 12
Thermometer.....	76.1	76.3	75.6	75.4	75.8	75.8	76.	76.7	77.2	77.1	77.	Thermometer.

[184].

MAGNETIC TERM DAY:--DECLINATION MAGNETOMETER.

SEPTEMBER 22, 2021.]

[illegible]

SEPTEMBER 22, 23.]

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

[1841.

Göttingen time.....		<i>h.</i> 22 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i> 2 30.....	529.9	522.2	512.2	512.2	516.2	511.3	512.	514.4	521.8	519.3	524.7	516.5	512.2	<i>m.</i> .....22
12 30.....	525.3	518.	513.4	517.1	517.1	513.5	512.5	521.1	519.1	516.2	523.9	515.8	509.1	.....32
22 30.....	530.7	516.6	513.3	513.9	512.4	513.1	518.3	521.7	517.	517.4	524.1	515.1	511.2	.....42
32 30.....	526.5	518.3	510.6	512.4	512.4	513.2	515.6	521.6	513.4	521.8	524.6	516.9	509.6	.....52
42 30.....	530.7	513.1	512.6	514.	514.	513.9	516.1	520.8	517.	519.2	524.7	513.8	517.0	.....2
52 30.....	525.2	510.2	514.2	518.1	518.1	511.9	516.2	518.7	523.	522.4	516.1	.....	515.4	.....12
Thermometer.....	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.1	66.8	66.8	66.5	66.4	... Thermometer.
Göttingen time.....		<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i> 2 30.....	510.	512.4	506.8	506.8	506.7	514.3	527.4	528.●	522.6	523.	532.3	513.3	517.7	<i>m.</i> .....22
12 30.....	507.5	511.4	508.3	508.4	508.4	515.7	528.1	526.3	521.6	510.8	520.9	515.6	510.2	.....32
22 30.....	505.3	509.9	506.3	510.	510.	518.	528.2	525.1	521.	516.2	520.5	513.5	513.	.....42
32 30.....	510.8	507.8	509.	510.2	510.2	520.4	528.1	524.8	525.6	532.4	537.3	513.2	512.8	.....52
42 30.....	511.9	508.9	507.2	510.5	510.5	524.	530.	524.6	521.	537.4	522.3	514.7	511.3	.....2
52 30.....	514.6	507.5	504.6	512.3	512.3	526.6	530.	526.8	524.	534.4	521.4	515.8	508.7	.....12
Thermometer.....	66.	65.	65.5	65.7	65.7	66.2	67.	67.1	67.5	68.	68.	68.	68.	... Thermometer.

September 22, 23.]

MAGNETIC TERM DAY. — VERTICAL FORCE MAGNETOMETER.

[1841.

Göttingen time.....	<i>h.</i> 23 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i> 37	635.2	636.	635.7	637.9	640.	640.3	640.5	639.5	638.3	636.7	634.1	632.9	<i>m.</i> .....27
17 30.....	635.1	636.	636.2	635.4	640.	641.6	640.	639.1	638.5	636.9	635.	633.	.....37
27 30.....	635.	636.	636.8	638.2	639.9	641.6	639.8	639.5	638.5	636.1	635.	632.9	.....47
37 30.....	635.7	636.	636.8	638.2	640.1	641.6	639.8	639.4	638.	636.1	634.2	631.9	.....57
47 30.....	636.2	635.9	637.	.....	640.3	641.	639.7	639.	637.5	635.	633.2	632.1	.....7
57 30.....	636.1	636.1	637.2	639.4	640.6	640.8	639.2	638.7	637.1	634.8	633.5	631.5	.....17
Thermometer.....	68.	68.	68.	68.	68.	68.	68.	87.6	67.4	67.2	67.	66.8	...Thermometer.
Göttingen time.....	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i> 7	630.	627.5	628.	627.4	625.3	632.	639.8	646.	651.5	656.8	659.	659.1	<i>m.</i> .....27
17 30.....	631.4	627.4	628.	627.2	625.4	633.1	641.	647.	652.1	656.9	659.6	660.	.....37
27 30.....	631.5	628.8	627.7	626.	625.9	635.	642.	647.6	652.9	657.3	659.9	660.	.....47
37 30.....	631.	628.3	628.	626.4	627.5	636.6	643.	648.6	654.8	657.7	660.	659.7	.....57
47 30.....	630.3	628.5	627.6	625.2	629.	637.3	644.1	649.3	655.9	658.1	660.	659.3	.....7
57 30.....	628.5	628.3	627.6	625.1	630.1	638.2	645.1	650.7	656.1	659.	659.	659.4	.....17
Thermometer.....	66.8	66.7	66.5	66.4	66.8	67.3	68.	88.	68.5	68.9	69.	69.	...Thermometer.

[1841.]

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

OCTOBER 20, 21.]

Göttingen time.....	<i>h.</i> 22 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time. <i>m.</i>
<i>m.</i> 7 30.....	468.8	468.9	465.5	464.2	471.5	463.7	461.7	461.8	447.3	442.9	443.	.....27
17 30.....	468.6	469.	465.3	465.	472.4	467.1	462.3	465.5	455.8	439.8	434.1	.....37
27 30.....	468.8	468.6	467.3	466.5	471.1	461.7	463.1	451.2	462.	435.1	436.2	.....47
37 30.....	470.1	466.6	465.7	461.4	469.2	458.8	461.4	444.4	457.1	434.4	434.5	.....57
47 30.....	468.6	466.7	464.7	463.6	467.5	457.3	460.1	443.	449.8	436.9	434.9	.....7
57 30.....	469.1	468.9	465.6	464.8	467.9	466.	460.	459.5	446.	446.	436.8	432.3	.....17
Thermometer.....	56.	56.	56.	56.	55.8	55.	54.8	54.2	53.7	53.	53.	Thermometer.

Göttingen time.....	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time. <i>m.</i>
<i>m.</i> 7 30.....	430.8	428.4	429.2	427.9	428.4	436.6	452.2	463.6	471.	472.1	475.7	488.8	.....27
17 30.....	433.8	430.4	424.6	426.7	429.3	438.6	456	464.5	472.	473.	477.5	490.6	.....37
27 30.....	431.8.	430.5	427.2	427.3	431.2	440.8	458.4	465.5	472.8	474.	480.9	490.8	.....47
37 30.....	430.	429.7	432.6	426.7	432.	442.8	458.8	466.8	473.	474.5	483.8	492.5	.....57
47 30.....	430.	431.	425.8	427.6	433.7	445.8	460.8	463.2	473.1	477.2	486.	492.4	.....7
57 30.....	428.3	431.1	428.9	427.6	435.1	449.4	463.2	469.8	472.7	473.2	487.1	492.	.....17
Thermometer.....	53.	53.	53.2	53.	53.5	55.	55.3	56.	56.7	57.2	57.9	57.8	Thermometer.

[1841.]

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

NOVEMBER 26, 27.]

Göttingen time...	h.												Observatory time.											
m.	23	23	17	18	0	1	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
0	558.5	560.1	558.1	556.1	554.1	552.1	550.1	548.1	546.1	544.1	542.1	540.1	538.1	536.1	534.1	532.1	530.1	528.1	526.1	524.1	522.1	520.1	518.1	516.1
5	559.7	561.3	559.3	557.3	555.3	553.3	551.3	549.3	547.3	545.3	543.3	541.3	539.3	537.3	535.3	533.3	531.3	529.3	527.3	525.3	523.3	521.3	519.3	517.3
10	559.1	561.7	559.7	557.7	555.7	553.7	551.7	549.7	547.7	545.7	543.7	541.7	539.7	537.7	535.7	533.7	531.7	529.7	527.7	525.7	523.7	521.7	519.7	517.7
15	559.4	562.0	560.0	558.0	556.0	554.0	552.0	550.0	548.0	546.0	544.0	542.0	540.0	538.0	536.0	534.0	532.0	530.0	528.0	526.0	524.0	522.0	520.0	518.0
20	560.1	562.7	560.7	558.7	556.7	554.7	552.7	550.7	548.7	546.7	544.7	542.7	540.7	538.7	536.7	534.7	532.7	530.7	528.7	526.7	524.7	522.7	520.7	518.7
25	559.9	562.5	560.5	558.5	556.5	554.5	552.5	550.5	548.5	546.5	544.5	542.5	540.5	538.5	536.5	534.5	532.5	530.5	528.5	526.5	524.5	522.5	520.5	518.5
30	561.1	563.7	561.7	559.7	557.7	555.7	553.7	551.7	549.7	547.7	545.7	543.7	541.7	539.7	537.7	535.7	533.7	531.7	529.7	527.7	525.7	523.7	521.7	519.7
35	561.1	563.7	561.7	559.7	557.7	555.7	553.7	551.7	549.7	547.7	545.7	543.7	541.7	539.7	537.7	535.7	533.7	531.7	529.7	527.7	525.7	523.7	521.7	519.7
40	560.7	563.3	561.3	559.3	557.3	555.3	553.3	551.3	549.3	547.3	545.3	543.3	541.3	539.3	537.3	535.3	533.3	531.3	529.3	527.3	525.3	523.3	521.3	519.3
45	568.4	571.0	569.0	567.0	565.0	563.0	561.0	559.0	557.0	555.0	553.0	551.0	549.0	547.0	545.0	543.0	541.0	539.0	537.0	535.0	533.0	531.0	529.0	527.0
50	558.9	561.5	559.5	557.5	555.5	553.5	551.5	549.5	547.5	545.5	543.5	541.5	539.5	537.5	535.5	533.5	531.5	529.5	527.5	525.5	523.5	521.5	519.5	517.5
55	559.2	561.8	559.8	557.8	555.8	553.8	551.8	549.8	547.8	545.8	543.8	541.8	539.8	537.8	535.8	533.8	531.8	529.8	527.8	525.8	523.8	521.8	519.8	517.8

Göttingen time...	h.												Observatory time.											
m.	10	11	5	12	13	7	8	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
0	545.6	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3	547.3
5	546.5	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2	548.2
10	547.1	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7
15	546.8	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4
20	547.4	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0
25	547.4	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0
30	547.4	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0
35	547.4	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0
40	547.4	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0
45	547.4	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0
50	547.4	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0
55	547.1	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7	548.7

November 26, 27.]

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

[1841.]

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Göttingen time.....	h. 23 16	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time. m.23324252212
m. 2 30.....	491.3	488.	489.9	493.3	495.9	493.3	494.1	499.3	498.8	500.	496.7	497.3	.....23
15 30.....	489.3	489.	490.	497.1	497.	493.3	494.	498.7	497.6	499.7	498.	497.7	.....32
22 30.....	488.	489.1	489.	495.2	496.1	497.	498.2	498.	496.7	500.1	499.3	496.	.....42
32 30.....	488.9	490.7	490.3	495.3	496.2	500.2	497.7	498.8	501.2	499.6	499.9	495.6	.....52
42 30.....	487.4	490.5	491.5	496.2	493.1	496.7	498.2	499.8	501.1	499.1	498.9	494.6	.....2
52 30.....	489.	498.4	493.4	496.6	.....	497.9	499.	497.5	500.5	498.8	497.9	494.9	.....12
Thermometer.....	48.2	48.8	49.	49.3	49.8	50.	50.	50.6	50.4	49.9	49.1	48.6	Thermometer.

Göttingen time.....	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time. m. .....22.....32.....42.....52.....2.....12
m. 2 30.....	493.8	490.3	487.	492.8	490.6	496.9	490.3	500.	491.2	482.9	473.1	477.3	.....22
15 30.....	493.1	488.1	490.2	492.2	492.	493.	491.4	499.7	488.2	482.3	474.5	477.8	.....32
22 30.....	490.5	490.2	489.	489.4	491.6	491.7	494.1	495.9	486.9	480.9	476.4	480.4	.....42
32 30.....	491.9	487.9	487.7	488.6	493.3	490.9	495.8	495.6	486.7	481.3	477.6	483.7	.....52
42 30.....	490.3	489.	491.5	489.9	493.5	489.5	496.8	492.8	486.2	475.3	480.6	481.1	.....2
52 30.....	491.4	487.3	493.5	488.9	496.1	490.9	498.1	491.6	487.6	473.2	476.	480.3	.....12
Thermometer.....	47.7	47.3	46.7	45.6	44.8	44.1	44.	44.	44.1	44.	44.	43.9	Thermometer.

[1841.]

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

NOVEMBER 26, 27.]

Göttingen time.	h. 23 17	h. 0 19	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time.
m. 7 30.....	334.7	338.4	344.5	351.	356.	362.	366.7	371.7	374.	370.2	364.1	m. .....27
17 30.....	335.1	339.	345.3	351.8	356.7	363.1	367.5	371.8	373.4	369.3	363.	.....37
27 30.....	335.6	339.8	346.7	353.	357.6	364.	368.1	372.8	375.4	368.6	361.5	.....47
37 30.....	336.2	340.8	347.8	353.7	360.3	364.6	369.1	373.5	372.1	367.	360.2	.....57
47 30.....	336.6	341.6	348.8	354.5	360.1	365.1	370.1	374.	371.4	366.3	359.1	.....7
57 30.....	337.5	343.1	350.1	355.	361.5	365.5	371.	374.7	371.1	365.6	357.717
Thermometer.....	48.7	49.	49.1	49.7	50.	50.5	50.5	51.1	50.5	50.	49.	Thermometer.

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[97]

Göttingen time.	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time.
m. 7 30.....	347.9	340.1	332.5	321.1	310.8	307.	305.6	304.7	307.2	310.	303.3	m. .....27
17 30.....	348.4	339.8	330.5	320.1	309.4	307.	305.2	305.3	307.4	309.5	310.2	.....37
27 30.....	345.5	339.1	329.3	317.3	309.	307.	305.5	304.6	308.6	305.1	310.8	.....47
37 30.....	343.8	337.1	327.5	315.9	308.2	307.	305.6	305.6	308.5	303.2	310.7	.....57
47 30.....	342.5	335.6	325.7	314.3	308.	306.4	305.	305.6	309.	303.6	310.5	.....7
57 30.....	341.5	334.1	323.8	312.4	306.6	305.9	306.1	306.1	309.1	302.6	308.3	.....17
Thermometer.....	48.	47.8	47.	46.	45.8	45.8	45.9	46.	46.3	47.	46.6	Thermometer.

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

Dresden 23, 23.]

[1841.

Göttingen time	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i> 0	544.6	552.3	553.5	551.3	552.6	554.3	557.3	555.5	555.	556.2	561.1	<i>m.</i> 19 30
5	543.9	552.	552.5	552.	553.1	555.	557.3	555.7	556.5	556.5	562.1	24 30
10	541.2	552.8	551.8	552.1	553.3	555.8	557.	555.5	557.1	537.	563.7	29 30
15	541.8	553.3	550.6	552.6	553.9	555.6	556.9	555.5	557.	541.	564.9	34 30
20	542.	553.2	550.2	553.	553.5	556.	556.6	554.8	556.2	544.8	565.9	39 30
25	542.6	553.8	551.	553.1	553.6	555.6	556.7	555.1	555.2	548.8	566.3	44 30
30	541.7	554.2	550.7	553.1	553.2	556.	556.5	554.4	554.3	551.5	566.8	49 30
35	541.5	554.1	549.5	553.3	553.3	556.7	556.5	553.4	553.4	554.8	565.8	54 30
40	542.2	554.4	548.9	553.2	553.6	556.8	556.7	555.8	550.8	556.7	567.	59 30
45	543.	554.2	549.6	552.9	553.2	557.1	556.3	555.7	547.7	559.6	566.7	4 30
50	543.2	554.2	550.2	552.5	553.4	556.9	556.1	555.	542.3	560.2	565.5	9 30
55	542.8	554.5	550.1	552.9	553.9	557.8	556.1	554.6	540.	560.4	561.7	14 30

Göttingen time	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i> 0	561.1	560.1	558.2	557.9	559.2	558.7	557.7	555.5	552.	551.4	553.	551.4	<i>m.</i> 19 30
5	559.6	560.9	558.	559.	559.5	559.7	557.	555.2	551.7	551.6	553.2	554.2	24 30
10	559.3	558.6	556.4	559.	560.1	559.	557.4	554.8	552.	551.9	553.3	554.4	29 30
15	557.3	558.5	556.	559.7	560.5	558.6	557.3	553.5	552.1	551.9	553.4	554.1	34 30
20	557.3	557.	556.3	559.9	560.4	558.3	557.	553.	552.	551.5	554.	554.2	39 30
25	558.9	558.	556.4	560.2	560.1	558.1	556.2	553.	552.2	551.5	553.8	551.9	44 30
30	558.	556.8	557.1	560.	561.	556.8	555.7	552.5	552.2	551.6	553.8	555.1	49 30
35	560.4	567.8	557.	560.	560.2	557.5	556.1	552.9	552.2	551.7	554.1	555.6	54 30
40	558.3	558.3	557.8	559.8	559.8	557.	555.8	552.1	551.6	551.6	554.3	555.5	59 30
45	561.1	558.1	557.5	558.5	560.4	558.	556.2	552.2	552.	552.	554.3	555.6	4 30
50	561.6	556.4	557.1	557.1	560.	557.9	555.5	551.7	551.5	552.2	551.6	556.	9 30
55	560.9	.....	557.5	560.	559.4	567.6	555.6	551.7	551.3	552.3	554.5	556.	14 30

[1841].

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

DECEMBER 22, 28.]

Göttingen time.....	A. 22 16	h. 23 17	A. 0 18	h. 1 19	A. 2 20	h. 3 21	A. 4 22	A. 5 23	h. 6 0	A. 7 1	A. 8 2	h. 9 3	Observatory time.
74.	A.	h.	A.	h.	A.	h.	A.	A.	h.	A.	h.	h.	74.
2 30	507.7	506.7	516.3	519.2	519.7	520.6	515.8	525.3	519.7	527.2	510.	511.3	22
12 30	514.1	511.	510.6	517.4	516.5	520.7	520.8	521.1	519.2	532.3	503.2	509.6	32
32 30	508.5	514.6	512.	523.6	517.7	520.9	517.8	520.5	521.2	535.	497.8	507.9	42
33 30	509.7	513.	514.5	518.3	521.6	531.4	525.9	531.6	527.1	539.1	503.5	510.7	52
42 30	508.1	515.4	510.5	520.8	521.2	522.1	533.5	516.2	519.8	530.	510.1	512.7	62
52 30	503.5	516.	511.	521.7	520.9	520.9	522.5	523.8	523.9	521.3	513.5	516.5	12
Thermometer.....	59.	56.9	57.9	56.7	56.	55.	56.	54.	53.	53.9	52.1	51.2	Thermometer.

Göttingen time.....	A. 10 4	h. 11 5	A. 13 6	h. 13 7	K. 14 8	A. 15 9	h. 16 10	h. 17. 11	A. 18 12	h. 19 13	A. 20 14	h. 21 15	Observatory time.
74.	A.	h.	A.	h.	K.	A.	h.	h.	A.	h.	A.	h.	74.
2 30	517.8	505.	504.9	522.7	509.8	520.	528.7	545.6	546.	540.5	531.6	529.8	22
12 30	513.3	504.6	506.	520.2	513.2	517.6	528.3	542.8	545.9	539.3	520.2	531.	32
32 30	515.3	501.	508.5	517.9	511.4	518.	524.6	541.6	544.5	541.8	532.	533.2	42
33 30	525.7	510.3	514.3	512.6	514.	521.4	539.	543.8	538.2	540.7	531.8	532.2	52
42 30	509.7	513.6	513.6	511.7	513.8	524.	541.2	547.2	540.1	524.8	529.1	530.2	2
52 30	509.3	512.2	520.	510.2	516.1	526.6	543.5	546.8	542.5	537.4	529.7	531.3	12
Thermometer.....	49.8	49.2	49.8	50.8	51.6	53.	54.7	56.	57.3	56.9	60.	61.	Thermometer.

[1841.]

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

Dresden 22, 23.]

Göttingen time.....	h. 22 16	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time.
Thermometer.....	67.	66.	64.	62.3	61.9	61.3	61.	59.1	58.	58.	57.5	55.	Thermometer.
Göttingen time.....	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time.
Thermometer.....	53.8	53.7	55.4	57.	57.6	60.	62.5	63.5	64.9	66.	67.	67.4	Thermometer.

Thermometer.....	67.	66.	64.	62.3	61.9	61.3	61.	59.1	58.	58.	57.5	55.	Thermometer.
Göttingen time.....	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time.
Thermometer.....	53.8	53.7	55.4	57.	57.6	60.	62.5	63.5	64.9	66.	67.	67.4	Thermometer.

MAGNETIC OBSERVATORY

AT THE

GIRARD COLLEGE, PHILADELPHIA.

ORDINARY METEOROLOGICAL OBSERVATIONS,

FROM JANUARY TO JUNE, 1841.

GENERAL NOTES.

The instruments and their position, the times of observation, and the mode of observing, recording and correcting the results, are generally the same as have already been stated in the notes preceding the observations of June, 1840.

In the column for the observed dew point, D. is the temperature of deposition, and A. that of the thermometer attached to the column of the hygrometer.

The register of light rains is imperfect, and that of snows defective.

The changes in the form of recording the observations in the month of June are sufficiently explained by the titles at the head of the several columns. The direction of the wind is registered in degrees, reckoning from the south as zero, round through the west. The directions of the motion of the three strata of clouds are noted in the same manner. No. 1 is intended to refer to the lowest stratum, and No. 3 to the highest.

The indications of two different thermometers are registered in the column headed "radiation." One was covered with a flock of cotton, and exposed to the sky at night; the other had a bulb of black glass, and was exposed to the sun.

Date.		Barometer.			Therm'rs, Fah.		Force of vapor, ins.	Dew point, Fah.	Hyg., Gauges &c.	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
1	A. M.							3 A. M.	80.	NNW.			8	N. (?)
	0 25	2.7	764.60	30.086	28.	27.5	.165	(D. 21.3)	83.	NNE.			1	Cl-cu.
	2 25	1.9	764.80	30.089	24.	23.2	.137	(A. 23.4)	83.1	NNE.			8	N.
	4 25	1.1	763.85	30.064	22.6	21.5	.125	9 A. M.	84.	ENE.			8	N.
	6 25	0.5	762.25	30.004	22.2	20.9	.121	(D. 16.)	82.8	ENE.			8	N., snowing.
	8 25	-0.2	760.10	29.923	22.5	21.	.119	(A. 20.3)	92.	ENE.	1		8	N., snowing.
	10 25	-0.8	759.00	29.880	20.6	20.5	.131		91.5	ENE.	1		8	N., snow and hail.
	12 25	-1.2	752.60	28.633	20.3	20.6	.130		92.	ENE.	2		8	N., snow and hail.
	14 25	-1.3	747.25	29.422	23.4	23.2	.113		93.	ENE.			8	N., rain.
	16 25	-0.7	742.75	29.242	20.1	20.	.176		93.	N.		.05	8	N., rain.
	18 25	0.	740.50	29.151	20.1	20.	.178		89.	NW.			5	Cl-cu., N.
	20 25	-0.3	741.30	29.182	27.3	26.9	.169		87.	WNW.				Clear.
2	0 25	-0.8	744.70	29.317	21.8	21.4	.134		85.	W.				Clear.
	2 25	-1.2	747.75	29.375	20.8	20.5	.129		84.	W.				Clear.
	4 25	-1.7	748.00	29.452	20.1	19.9	.137		85.3	W.				Clear.
	6 25	-2.4	748.95	29.495	17.9	17.5	.114	9 A. M.	86.	WSW.				Clear.
	8 25	-3.2	749.75	29.525	19.	18.9	.123	(D. 16.)	85.2	WSW.			3	Cl.
	10 25	-1.	750.00	29.630	24.6	23.2	.131	(A. 20.1)	81.5	WSW.			4	Cl., Cl-cu.
	12 25	0.1	748.70	29.474	26.8	25.	.137	3 P. M.	78.8	W.			3	Cl.
	14 25	0.7	748.85	29.476	27.7	26.7	.155	(D. 24.5)	89.	WSW.			1	Cu., Cl-cu., Cl-s.
	16 25	1.	749.20	29.603	27.7	26.2	.131	(A. 28.4)	80.	SW.			5	Cu., Cl-cu.
	18 25	0.4	750.00	29.533	28.6	20.6	.102	9 P. M.	73.	W.				Clear.
	20 25	-0.5	752.45	29.634	18.2	16.8	.101	(D. 15.)	72.5	WNW.				Clear.
	22 25	-1.7	753.25	29.661	15.	13.	.080	(A. 16.8)	71.	NW by W.				Clear.

Day.	Hour.	Barometer.			Therm's, Foh.		Force of vapor, ins.	Dew point, Foh.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
4	0	-10.5	762.40	30.064	3.3	2.4	.058	3 A. M.:	69.3	WNW.	..	..	..	Clear.
	2	-11.2	762.80	30.083	3.5	2.6	.059	(D. 1.5)	70.1	NW.	..	..	..	N.
	4	-11.2	763.20	30.098	4.5	4.	.068	(A. 4.3)	70.9	NW.	..	..	..	Cu-s.
	6	-11.2	763.75	30.120	3.5	3.	.064	.....	72.	NW by W.	..	..	..	Cu, Ci, Ci-cu, Ci-s
	8	-11.3	764.60	30.155	5.	4.6	.069	.....	72.	W.	..	..	..	Cl, Ci-cu, Cu-s.
	10	-10.2	765.75	30.194	9.	7.8	.076	.....	71.5	W.	..	..	..	Cl, Ci-cu.
	12	-8.8	765.20	30.166	13.6	12.2	.083	.....	70.	W.	..	..	..	Cl-cu, N.
	14	-7.	765.60	30.172	15.7	14.4	.092	.....	73.	SW.	..	..	..	Cl-cu.
	16	-6.4	765.80	30.177	14.5	13.6	.093	.....	73.5	WSW.	..	..	..	Cl, Ci-cu.
	18	-6.5	766.90	30.221	11.7	11.5	.092	9 P. M.:	77.5	W.	..	..	..	Clear.
5	20	-7.	768.70	30.295	9.2	9.2	.087	(D. 1.6)	83.	W.	..	..	..	Clear.
	22	-7.3	768.90	30.305	9.	8.	.086	(A. 9.3)	83.5	N.	..	..	..	Cl, Ci-s.
	0	-7.5	769.55	30.331	8.2	8.	.081	3 A. M.:	85.	N.	..	..	..	Cl, Ci-s
	2	-7.6	770.30	30.360	7.7	7.5	.079	(D. 4.5)	84.2	NE.	..	..	..	Cl-s.
	4	-7.8	770.65	30.376	10.	9.3	.080	(A. 8.9)	81.4	ENE.	..	..	..	Cl-cu, N.
	6	-9.6	771.50	30.368	12.5	12.	.091	9 A. M.:	82.	E. by N.	..	..	..	Cl-cu, N.
	8	-7.5	772.35	30.441	13.9	12.8	.088	(D. 4.5)	80.	E. by N.	..	..	..	Cl-cu, N.
	10	-7.	772.80	30.456	16.9	15.9	.101	(A. 15.6)	81.	ENE.	..	..	..	Cl, Ci-cu.
	12	-6.	773.00	30.431	20.6	19.5	.116	3 P. M.:	81.5	ENE.	..	..	..	Cl, Ci-cu.
	14	-4.2	771.40	30.386	25.2	24.	.137	(D. 15.5)	82.5	ENE.	..	..	..	Cl, Ci-cu. and Ci-s.
6	16	-3.5	771.55	30.391	23.4	22.8	.137	(A. 24.5)	85.	NE.	..	..	..	Cl-cu, N.
	18	-3.	771.40	30.382	24.3	23.9	.145	9 P. M.:	88.1	NE.	..	..	..	Cl-cu, N.
	20	-2.8	771.40	30.381	25.8	25.4	.153	(D. 24.6)	89.	NE.	..	..	..	Cl-cu, N., raining lightly.
	22	-2.2	771.35	30.372	26.5	26.5	.164	(A. 27.8)	94.2	NE.	..	..	..	Cl-cu, N., raining lightly.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Day.	Hour.	Date.	Barometer.			Thermom., Fahr.		Force of vapor, ins.	Dew point, Fahr.	Hyg., Gay-Lussac's.	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
			Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.				Dir. points.	Force, lbs.			
6	0 35		2	770.25	30.331	28.7	28.5	174	3 A. M.: (D. 29.5)	94.2	NE	..	..	8	N., raining.
	2 25		1.3	769.40	30.296	30.5	..	..	(A. 31.)	95.7	ENE.	..	..	8	N., raining.
	4 25		0.8	768.75	30.268	32.5	31.9	..	9 A. M.: (D. 37.)	96.	ENE.	..	..	8	N., raining.
	6 25		0.1	768.10	30.238	34.3	31.5	198	9 A. M.: (D. 42.)	94.7	ENE.	..	26	8	N., raining.
	8 25		0.5	767.80	30.223	39.5	39.5	360	3 P. M.: (D. 41.3)	94.	ENE.	..	11	8	N., raining.
	10 25		1.9	767.60	30.216	43.8	43.5	396	(A. 45.)	91.	ESE.	..	16	8	N., raining.
	12 25		4	766.45	30.154	46.	45.	328	(D. 46.3)	92.5	ESE.	..	14	8	N., raining, very dense fog.
	14 25		5	766.10	30.134	46.7	45.7	333	9 P. M.: (A. 45.)	92.5	NW. by W.	..	04	8	N., raining, very dense fog.
	16 25		6	766.30	30.137	44.3	44.2	306	(D. 45.4)	93.	ENE.	..	12	8	N., raining, very dense fog.
	18 25		6.5	766.30	30.136	45.1	45.1	316	(D. 47.3)	93.	SSE.	..	23	8	N., raining, very dense fog.
	20 25		7	766.00	30.131	45.4	45.4	319	(A. 49.)	93.	SE.	..	15	8	N., raining, very dense fog.
	22 25		7.4	765.50	30.099	45.2	45.1	315	3 A. M.: (D. 47.3)	94.3	E. by S.	..	10	8	N., raining, fog.
7	0 25		7.8	763.90	30.034	44.6	44.6	310	(D. 48.)	95.1	ESE.	..	02	8	N., raining, fog.
	2 25		8	763.15	30.003	48.5	48.5	355	(A. 55.6)	95.2	SE.	..	02	8	Raining, fog cleared.
	4 25		8.4	761.80	29.949	50.	50.	373	9 A. M.: (D. 48.)	95.1	S.	..	02	8	N., ceased raining.
	6 25		9	761.70	29.942	52.1	53.	413	(A. 55.6)	95.	S. by E.	1	..	8	N., scud flying from S.
	8 25		10	761.30	29.921	54.7	54.3	428	..	95.	SSE.	4	..	8	N., raining.
	10 25		11.3	760.40	29.880	56.8	55.7	441	..	95.	SSE.	4	20	8	N., raining.
	12 25		12.6	758.50	29.800	57.1	56.3	453	..	95.	SSE.	4	21	8	N., raining.
	14 25		13	757.40	29.754	56.7	56.	450	..	95.	SSE.	4	02	8	N., raining.
	16 25		13.5	757.25	29.745	56.8	56.	449	..	95.	SSE.	4	02	8	N., raining.
	18 25		13.9	757.95	29.744	56.5	55.6	441	9 P. M.: (D. 52.5)	99.8	SSE.	3	02	8	N., raining.
	20 25		13.9	756.85	29.728	56.	55.7	450	(A. 56.)	100.	S. by E.	4	02	8	N., raining.
	22 25		14.6	757.80	29.763	53.6	53.6	423	..	98.	SSW.	..	60	8	N., raining.

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DAILY METEOROLOGICAL OBSERVATIONS.

[1941.

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Date.		Barometer.				Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Dir. points.				Force, lbs.				
8	A. M.														
	0 25	14.	757.70	29.762	52.	52.	400	3 A. M.: (D. 44.7)	98.	WSW.		10	8	N., very foggy.	
	2 25	13.8	759.26	29.822	49.6	49.6	367	(D. 44.7)	98.	W. by N.				Clear.	
	4 25	12.8	760.80	29.889	45.2	44.9	310	(A. 47.)	97.3	W. by N.				Clear.	
	6 25	11.9	761.96	29.938	43.	43.	283	9 A. M.: (D. 40.2)	92.	NW. by N.			1	Clear.	
	8 25	11.	762.60	29.967	41.6	39.2	230	(D. 40.2)	88.5	NW. by N.			4	Light Ci. and Ci-s.	
	10 25	10.8	763.50	30.004	42.6	40.3	241	(A. 42.8)	88.	NNW.			2	Light Ci. and Ci-s.	
	12 25	11.6	761.60	29.926	...	...	...	3 P. M.: (D. 40.3)	86.5	NNW.			6	Ci., Ci-s, Ci-cu.
	14 25	12.3	762.10	29.942	44.4	42.8	273	(D. 40.3)	84.3	N.			7	Cu., Ci-cu, N.	
	16 25	12.1	762.86	29.972	45.5	43.	265	(A. 47.8)	87.	N. by W.			8	Cu., N.	
9	18 25	11.4	762.36	29.966	41.5	41.	268	9 P. M.: (D. 38.5)	91.	N. by W.			3	Cu., Ci-cu, Ci.	
	20 25	10.7	763.50	29.965	40.	38.	223	(D. 38.5)	89.5	N.			2	Cu., Ci-cu, Ci.	
	22 25	10.	763.15	29.983	36.5	34.9	203	(A. 38.6)	92.1	NW.			8	Ci., Ci-cu, Ci-s.	
	0 25	9.	762.70	29.991	34.5	33.	190	3 A. M.: (D. 31.7)	93.	NW. by N.			8	Ci., Ci-cu, Ci-s.	
	2 25	8.	762.95	29.996	33.8	32.5	188	(D. 31.7)	94.	NW.			8	Cu., Ci-cu, Ci-s.	
	4 25	7.5	763.25	30.010	33.	31.5	181	(A. 33.3)	94.	NW.				Cu. in W.	
	6 25	6.6	763.50	30.023	32.2	31.	180	9 A. M.: (D. 23.1)	94.4	NW.				Ci. in SE.	
	8 25	6.5	764.50	30.065	34.3	33.3	198	(D. 23.1)	93.7	NNW.				Ci. in SE.	
	10 25	6.9	765.00	30.082	37.	36.3	224	(A. 34.4)	89.2	NNW.			6	Ci., Ci-cu, Cu-s.	
	12 25	7.7	764.20	30.048	40.	37.1	206	4 P. M.: (D. 38.5)	86.	NNE.			8	Ci., Ci-cu.	
14 25	7.9	763.80	30.029	41.5	38.4	215	(D. 38.5)	85.9	NW.			8	Ci., Ci-cu.		
16 25	8.	764.25	30.047	41.7	38.7	212	(A. 41.6)	85.5	N. by E.			7	Hazy.		
18 25	8.	764.60	30.061	38.7	37.	219	9 P. M.: (D. 33.)	91.5	SW. by S.			7	Ci., Ci-cu.		
20 25	7.7	764.80	30.070	36.7	35.7	216	(D. 33.)	93.5	SSW.			8	N.		
22 25	7.2	764.75	30.071	34.1	33.6	203	(A. 35.6)	94.	W.						

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Day.	Date.	Barometer.			Therm'ms, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saumure's.	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
66	11	h. m.												
	0 25	...	...	...	...	...	...	...	...	N.	...	...	...
	2 25	...	...	...	...	...	...	...	...	NNE.	...	...	...
	4 25	...	...	...	...	...	...	...	...	ENE.	...	.10	...	
	6 25	...	...	...	...	...	...	...	...	ENE.	...	.24	...	
	8 25	...	...	...	...	...	...	...	...	ENE.	...	.02	...	
	10 25	...	...	...	...	...	...	...	...	ENE.	...	.05	...	
	12 25	6.5	765.00	29.691	43.3	42.	.280	3 P. M.: (D. 39.)	93.	NNE.	...	.03	8	Fine mizzling rain.
	14 25	7.	764.38	29.682	43.3	43.1	.292	(A. 39.6)	91.	NW.	...	.03	8	Fine mizzling rain.
	16 25	7.4	764.40	29.663	41.6	41.5	.278		95.4	SW.	...	.01	8	Fine mizzling rain.
	18 25	...	...	...	...	...	...	...	...	WSW.	...	...	...
67	20 25	7.9	766.15	29.729	40.	39.8	.281	...	95.6	SW.	...	...	8	N.
	22 25	7.3	767.15	29.772	38.3	38.3	.249	...	95.9	SW. by W.	...	...	8	N.
	0 25	6.9	768.10	29.807	36.5	36.	.224	3 A. M.: (D. 35.)	93.9	SW.	...	...	...	Clear.
	2 25	6.8	768.10	29.890	36.8	36.8	.214	(A. 39.8)	81.9	W.	...	...	...	Clear.
	4 25	6.3	761.60	29.951	40.3	35.8	.178	9 A. M.: (D. 35.)	77.	WNW.	...	...	...	Clear.
	6 25	6.	763.60	30.030	38.7	35.	.180		76.	WNW.	...	...	...	Clear.
	8 25	6.	765.00	30.085	38.2	34.5	.176	(A. 38.8)	76.	WNW.	...	...	3	Ci., Ci-a.
	10 25	6.5	766.65	30.150	39.8	35.8	.182	3 P. M.: (D. 29.)	74.	WNW.	...	...	7	Ci., Ci-a.
	12 25	8.	766.10	30.120	41.6	38.5	.216	(A. 44.)	72.5	NW.	...	...	3	Ci., Ci-a.
	14 25	8.3	768.30	30.156	41.6	36.2	.169	(D. 29.)	71.5	NW.	...	...	2	Ci., Ci-a.
	16 25	8.2	767.00	30.153	39.3	34.5	.163	9 P. M.: (D. 38.4)	71.7	NW. by W.	...	...	9	Ci., Ci-a.
	18 25	7.4	767.50	30.178	32.7	31.9	.191		74.	W.	...	...	...	Clear.
	20 25	6.4	767.60	30.187	31.2	30.	.174	(A. 41.)	74.	N.	3	Ci. in W.
	22 25	5.8	767.80	30.198	31.	29.5	.167		74.	N.	Ci. in W.

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DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Date.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
13	a. m.													
	0 25	9.	767.40	30.185	32.	30.7	.177	3 A. M.:	88.4	SW.	.	.	8	N.
	2 25	4.8	766.90	30.167	32.4	31.6	.188	(D. 31.6)	92.8	S.	.	.	8	N.
	4 25	4.8	767.25	30.180	32.8	31.5	.183	(A. 32.3)	90.3	E.	.	.	8	N.
	6 25	4.5	766.30	30.145	33.3	31.7	.181	9 A. M.:	88.4	ENE.	.	.	8	N.
	8 25	4.8	765.70	30.119	32.2	31.8	.194	(D. 30.2)	94.	E.	.	.	8	Snowing.
	10 25	4.7	765.40	30.108	33.5	33.1	.203	(A. 33.4)	91.	ENE.	.	.	8	N.
	12 25	4.6	761.80	29.967	33.	32.9	.203	3 P. M.:	94.	ENE.	.	.	8	Snowing fast.
	14 25	4.4	759.40	29.873	33.	32.8	.203	(D. 31.6)	94.	ENE.	.	.	8	Snowing fast.
	16 25	4.6	760.25	29.906	33.	32.8	.203	(A. 33.)	95.	NE.	.	.	8	Snow and rain.
	18 25	4.5	769.60	29.877	33.	32.6	.200		93.1	ENE.	.05	.05	8	Snow and rain.
	20 25	4.	760.40	29.917	33.	32.6	.200		92.5	ENE.	.05	.05	8	Raining gently.
	22 25	3.6	761.00	29.940	32.8	32.4	.198		92.	ENE.	.06	.06	8	Raining gently.
	0 25	3.5	761.40	29.956	32.7	32.1	.193	3 A. M.:	92.	ENE.	.05	.05	8	N., raining lightly.
14	2 25	2.9	762.35	29.996	32.6	32.1	.194	(D. 29.3)	90.	ENE.	.01	.01	8	Mizzling rain.
	4 25	2.7	763.20	30.030	32.5	32.	.193	(A. 32.5)	91.8	ENE.	.02	.02	8	Mizzling rain.
	6 25	2.6	764.40	30.080	32.1	31.9	.197	9 A. M.:	91.	ENE.	.01	.01	8	Mizzling rain.
	8 25	2.6	765.50	30.123	31.8	31.3	.189	(D. 28.8)	91.	ENE.	.	.	8	N.
	10 25	2.8	767.10	30.184	31.8	31.	.184	(A. 31.8)	90.	ENE.	.	.	8	N.
	12 25	3.	766.40	30.156	31.4	30.6	.182		90.	ENE.	.	.	8	N.
	14 25	3.	766.40	30.156	30.8	30.1	.179		90.5	ENE.	.	.	8	N.
	16 25	2.9	767.10	30.183	30.1	29.6	.178		92.5	ENE.	.	.	8	N.
	18 25	2.8	767.40	30.196	29.1	28.5	.170		87.	ENE.	.	.	8	N.
	20 25	2.4	767.70	30.210	29.1	29.	.178		87.	ENE.	.	.	8	N.
	22 25	2.	767.10	30.188	30.1	27.7	.147		89.	ENE.	.	.	8	N.

DAILY METEOROLOGICAL OBSERVATIONS.

Day.	Date.		Barometer.			Therm'ms, Fah.		Force of vapor, ins.	Dew point, F. ab.	Hygt., Gauges's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
	Hour.	a. m.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
15	0	25	1.8	766.40	30.162	30.6	30.1	.181	3 A. M.:	92.	ENE.	..	..	8	Raining lightly.
	2	25	1.7	766.05	30.148	31.	30.8	.189	(D. 29.9)	94.9	ENE.	..	..	8	Raining lightly.
	4	25	1.8	765.70	30.134	31.5	31.1	.189	(A. 31.1)	92.	ENE.	..	..	8	Raining lightly.
	6	25	1.9	766.00	30.145	31.9	31.5	.192	9 A. M.:	93.2	ENE.	..	..	8	Raining lightly.
	8	25	2.	766.20	30.153	31.	30.8	.189	(D. 28.6)	93.5	NE.	..	..	8	Raining lightly.
	10	25	2.5	766.70	30.171	31.4	31.1	.190	(A. 31.3)	93.5	NE.	..	..	8	Fine mistral rain.
	12	25	3.	766.00	30.140	32.1	31.6	.191	3 P. M.:	93.	N. by E.	..	.05	8	Raining.
	14	25	3.5	766.00	30.137	32.8	32.	.191	(D. 31.1)	91.5	N. by E.	..	.09	8	Fine rain.
	16	25	4.	766.50	30.156	33.1	32.6	.198	(A. 33.)	92.	N.	..	.03	8	N., ceased raining.
	18	25	4.	767.00	30.175	32.6	32.5	.202	9 P. M.:	95.	NNW.	..	..	8	N.
	20	25	3.7	768.00	30.216	32.1	32.	.198	(D. 31.5)	94.	NW.	..	..	8	N.
	22	25	3.7	768.10	30.220	31.7	31.6	.195	(A. 31.7)	94.	NW.	..	..	8	N.
	0	25	3.5	768.30	30.228	32.1	32.	.198	3 A. M.:	94.	W. by N.	..	..	8	N.
	2	25	3.4	769.00	30.256	31.3	31.3	.194	(D. 30.1)	94.9	NW.	..	..	8	Thick fog.
	4	25	3.3	769.25	30.266	30.3	30.3	.188	(A. 31.1)	94.	NW.	..	..	8	Thick fog.
	6	25	3.	769.35	30.271	30.	30.	.186	9 A. M.:	94.	NE.	..	..	8	Thick fog.
16	8	25	3.	769.65	30.283	29.1	29.1	.180	(D. 28.1)	94.	E. by S.	..	..	8	Thick fog.
	10	25	3.2	770.90	30.331	31.6	31.1	.188	(A. 29.3)	94.	S.	..	..	8	N., fog clearing.
	12	25	3.8	769.20	30.261	34.4	....	....	3 P. M.:	91.	W.	..	..	8	N.
	14	25	4.	768.60	30.238	34.8	34.	.205	(D. 30.2)	90.	E. by N.	..	..	8	N.
	16	25	4.	767.40	30.190	33.5	33.	.201	(A. 34.1)	93.	E. by N.	..	..	8	N.
	18	25	4.	768.30	30.226	33.1	32.8	.202	9 P. M.:	93.	N. by E.	..	..	8	N.
	20	25	4.	767.00	30.174	33.	32.5	.197	(D. 31.)	93.	ENE.	..	..	8	N.
	22	25	3.9	766.20	30.143	32.8	32.6	.203	(A. 32.8)	95.	ENE.	8	N.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaumure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
18	4. m.	5.9	760.30	29.903	31.6	27.6	.129	.....	76.	WNW.	..	..	8	Overcast and dark.
	0 25	4.6	762.35	29.986	27.	24.1	.121	.....	74.4	WNW.	..	..	2	Cu., Cu.-s.
	2 25	3.	764.20	30.069	28.5	22.1	.126	.....	74.9	WNW.	..	..	1	Cu.
	4 25	3.	766.65	30.172	19.	18.2	.113	9 A. M.: ..	73.8	WNW.	1	..	6	Light Ci.-cu. and Ci.-s.
	6 25	1.8	769.00	30.270	16.5	14.	.079	(D. 12.)	70.	WNW.	3	..	6	Ci., Ci.-s.
	8 25	0.4	771.20	30.361	15.6	13.6	.082	(A. 16.)	67.5	WNW.	3	..	6	Ci., Ci.-s.
	10 25	-0.4	771.60	30.381	15.1	13.2	.082	9 P. M.: ..	64.	WNW.	2	..	4	Light Ci.
	12 25	-1.	772.20	30.400	15.1	12.1	.066	(D. 8.2)	63.5	W.	1	..	5	Light Ci. and Ci.-s.
	14 25	-0.2	773.00	30.439	13.8	11.5	.074	(A. 14.8)	61.1	W.	1	..	5	S., Ci.-s.
	16 25	-1.8	774.55	30.505	13.1	11.1	.073	.....	62.8	W.	1	..	4	S., Ci., (and N.?)
	18 25	-2.8	775.50	30.549	12.7	11.5	.082	.....	62.	W.	1	..	..	Clear.
	20 25	-4.	776.20	30.581	12.	9.5	.062	.....	64.	W.	..	..	..	Clear.
19	0 25	-5.3	776.70	30.602	11.3	9.1	.064	.....	64.	W.	..	..	..	Clear.
	2 25	-6.1	778.00	30.658	10.3	8.9	.072	.....	64.3	W. by N.	..	..	2	S.
	4 25	-6.8	778.45	30.678	9.5	8.8	.078	.....	65.7	W. by N.	..	..	2	N.?
	6 25	-7.3	779.65	30.728	8.1	6.6	.064	9 A. M.: ..	65.	WNW.	..	..	4	Light Ci. and Ci.-s.
	8 25	-7.3	780.50	30.761	8.2	6.7	.064	(D. 1.1)	66.	NW.	..	..	2	Light Ci. and Ci.-s.
	10 25	-7.	781.30	30.791	10.3	8.6	.068	(A. 8.3)	66.	NW.	..	..	6	Light Ci. and Ci.-s.
	12 25	-5.8	780.40	30.750	12.5	10.8	.075	3 P. M.: ..	66.	NW.	..	..	8	N., S.
	14 25	-5.	779.70	30.719	14.2	11.8	.070	(D. 4.)	65.5	NW.	..	..	8	N.
	16 25	-5.	780.00	30.730	14.2	12.1	.076	(A. 14.3)	66.5	NW.	..	..	8	N.
	18 25	-5.	779.40	30.707	14.2	12.5	.081	.....	67.	NNW.	..	..	7	Nearly overcast.
	20 25	-5.	779.00	30.691	15.2	13.6	.086	.....	69.	NE.	..	..	7	Nearly overcast, very dark.
	22 25	-5.	779.10	30.695	15.8	14.1	.087	.....	70.	NE.	..	..	7	Nearly overcast, very dark.

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

JANUARY.]

Day.	Hour.	Barometer.			Therm'ms, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Baum's.	Wind.		Rain, inches.	Sky covered, &c.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
30	A. M.						.092	3 A. M.: (D. 7.9)	71.	NNE.			8	N.?
	0 25	-5.1	777.90	30.649	16.5	15.	.087	(D. 7.9)	72.5	NNE.			8	N.
	2 25	-5.	777.75	30.643	17.	15.5	.089	(A. 17.1)	73.9	ENE.			8	N.
	4 25	-5.	776.75	30.603	17.5	15.5			78.	ENE.			8	N.
	6 25	-4.7	776.35	30.585	18.5	17.	.101	9 A. M.: (D. 15.6)	90.5	NE.			8	N., snowing.
	8 25	-5.	776.35	30.587	18.5	18.2	.118	(D. 15.6)	89.5	NE.			8	N., snowing.
	10 25	-4.	776.90	30.566	21.6	21.1	.130	(A. 20.)	90.	ENE.			8	N., snowing.
	12 25	-3.2	773.40	30.463	25.1	24.6	.148	3 P. M.: (D. 24.)	92.	ENE.			8	N., snowing.
	14 25	-2.4	772.00	30.403	27.6	27.2	.164	(A. 27.4)	93.5	ENE.			8	Snowing very fast.
	16 25	-2.	771.20	30.369	28.3	28.1	.171	9 P. M.: (D. 19.8)	91.2	ENE.			8	Snowing very fast.
	18 25	-0.5	770.15	30.320	29.5	29.	.174	(D. 19.8)	92.	ENE.			8	Snow and hail.
	20 25	-0.2	769.75	30.304	28.1	27.7	.167	(A. 27.6)	91.7	ENE.			8	Snow and hail.
	22 25	0.	769.10	30.288	30.1	29.6	.178		93.2	ENE.			8	Raining fast.
	0 25	0.8	764.80	30.104	31.4	31.	.188		93.1	ENE.	.04		8	Raining fast.
	2 25	1.	763.30	30.042	31.6	31.2	.190		93.1	ENE.	.06		8	Raining fast.
	4 25	1.3	760.60	29.936	32.	31.8	.196		92.7	ENE.	.10		8	Raining fast.
31	6 25	1.8	758.95	29.869	32.6	32.4	.200		92.	ENE.	.13		8	Raining fast.
	8 25	2.	757.50	29.811	33.2	33.	.205		95.	NNE.	.93		8	Raining fast.
	10 25	2.3	757.00	29.790	33.7	33.5	.208		93.5	NNE.	.23		8	Raining fast.
	12 25	2.7	754.75	29.700	35.1	34.6	.213		93.5	NNW.	.06		8	Raining.
	14 25	3.	751.30	29.681	34.6	34.3	.213		93.5	NNW.	.03		8	Raining pretty fast.
	16 25	3.2	754.70	29.695	35.1	34.8	.217		93.2	WNW.	.02		8	Raining pretty fast.
	18 25	3.	754.70	29.697	35.4	34.9	.215		92.	NNW.	.06		8	Raining pretty fast.
	20 25	3.	755.00	29.708	36.	35.3	.216		92.	NNW.	.06		8	Raining pretty fast.
	22 25	3.	755.85	29.741	33.8	33.3	.203		92.	NNW.	.06		8	Raining pretty fast.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Date.		Barometer.			Therm's, Fah.		Force of vapor, ine.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, eighs.	Clouds, &c.
Day.	Hour.	Temperature, centigrade,	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
22	y.	3.	756.10	29.750	34.6	33.7	.202	.....	90.6	NNW.	..	.05	8	N.
	0 25	..	.....	.....	.....	.....	.....	.....	.....	NNW.	2	..	..	..
	2 25	..	.....	.....	.....	.....	.....	.....	.....	NNW.	3	..	..	..
	4 25	..	.....	.....	.....	.....	.....	.....	.....	NNW.	..	..	..	..
	6 25	..	.....	.....	.....	.....	.....	9 A. M.: ..	.....	NNW.	..	..	8	Cu, Ci-cu, Cu-s.
	8 25	2.5	759.00	29.867	33.3	29.6	.146	(D. 25.6)	74.5	NNW.	2	..	8	Cu, Ci-cu, Cu-s.
	10 25	2.7	760.00	29.905	33.4	29.5	.143	(A. 33.3)	74.	NW.	..	..	8	Cu, Ci-cu, Cu-s.
	12 25	3.	758.80	29.857	33.1	29.5	.146	3 P. M.: ..	75.	NNW.	1	..	8	Ci-cu, N., Cu s.
	14 25	3.	758.00	29.825	32.3	29.2	.149	(D. 26.4)	76.7	NNW.	..	..	8	Ci-cu, N., Cu s.
	16 25	2.8	758.20	29.834	31.5	28.1	.139	(A. 32.1)	77.5	NNW.	..	..	8	N.
	18 25	2.5	757.90	29.825	30.	27.3	.141	9 P. M.: ..	77.5	NNW.	..	..	..	N.
	20 25	2.3	757.70	29.818	28.3	26.5	.146	(D. 25.)	78.5	NNW.	..	..	..	N.
	22 25	2.	757.25	29.801	27.	26.5	.159	(A. 27.7)	79.	NNW.	..	..	8	Heavy clouds.
	0 25	1.5	756.60	29.778	26.5	25.5	.148	3 A. M.: ..	79.9	NNW.	..	..	8	Heavy clouds.
	2 25	1.2	756.25	29.765	26.5	25.5	.148	(D. 24.8)	80.2	NW.	..	..	8	Heavy clouds.
	4 25	1.	756.05	29.757	26.5	25.6	.149	(A. 26.5)	81.2	NW.	..	..	8	Heavy clouds.
23	6 25	0.8	756.45	29.775	26.1	25.2	.147	9 A. M.: ..	85.	NNW.	..	..	8	Heavy clouds.
	8 25	0.8	757.00	29.797	26.6	25.4	.147	(D. 24.5)	88.	NNW.	..	..	8	Cu, N., Ci-cu.
	10 25	1.3	757.70	29.822	29.	27.	.147	(A. 27.8)	85.5	NNW.	..	..	8	Cu, N., Ci-cu.
	12 25	2.	756.65	29.777	30.3	27.5	.142	3 P. M.: ..	81.3	NNW.	..	..	8	Cu, N., Ci-cu.
	14 25	2.5	756.90	29.785	31.4	28.4	.145	(D. 25.5)	80.	NNW.	..	..	8	Ci-cu, N.
	16 25	2.5	757.40	29.805	32.	29.	.149	(A. 31.5)	80.	NNW.	..	..	8	Ci-cu, N.
	18 25	3.	758.70	29.853	31.8	29.6	.161	9 P. M.: ..	81.	W.	..	..	8	N.
	20 25	2.8	759.00	29.865	32.3	29.8	.169	(D. 23.8)	81.5	W.	..	..	8	N.
	22 25	2.8	759.00	29.865	31.3	29.8	.169	(A. 32.2)	87.	WSW.	..	..	8	N.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Date.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gausse's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
25	A. m.													
	0 25	4.3	755.55	29.724	32.3	31.5	.188	.....	94.3	NNW.	..	..	8	Thick heavy clouds. N (?)
	2 25	3.7	755.70	29.732	30.5	....	....	.....	95.	W.	..	..	2	Cl s. (?)
	4 25	3.2	755.50	29.726	30.5	30.	.181	.....	93.	SW.	..	..	1	Cu-s. (?)
	6 25	2.8	756.00	29.747	29.3	28.7	.171	9 A. M.: 31.1	93.9	SSW.	..	..	1	Cl, Cu-s, (?) foggy.
	8 25	3.	756.60	29.770	31.8	31.1	.186	(D. 31.6)	92.	SW.	..	..	1	Cu, Ci cu.
	10 25	4.5	757.20	29.787	40.4	36.5	.190	(A. 39.5)	80.	W.	..	..	..	A little Cu.
	12 25	6.6	756.80	29.761	42.7	37.8	.140	3 P. M.: 35.5	71.5	W. by N.	1	..	2	Cu, Ci cu.
	14 25	7.8	757.25	29.773	42.5	35.5	.148	(D. 31.8)	66.	NNW.	2	..	3	Cu, Ci cu.
	16 25	7.4	758.70	29.832	40.3	35.8	.178	(A. 42.5)	69.8	NNW.	2	..	8	Cu, Ci-cu, N.
	18 25	6.3	760.70	29.916	37.1	32.4	.149	9 P. M.: 30.2	63.	NW.	..	..	8	Cu, N.
	20 25	5.5	763.00	30.009	34.6	30.2	.142	(D. 29.5)	73.	NW.	1	..	4	Cu, Ci cu, N.
26	22 25	5.	763.50	30.031	32.8	28.3	.129	(A. 31.3)	72.	NW.	..	..	..	A few detached Cu.
	0 25	4.3	764.40	30.072	32.4	28.3	.133	3 A. M.: 27.5	73.	NW.	..	..	4	Dark heavy clouds.
	2 25	3.8	765.30	30.108	31.	27.5	.134	(D. 22.9)	74.8	NNW.	..	..	..	Clear.
	4 25	3.	765.50	30.120	28.7	26.7	.145	(A. 29.3)	79.	NNW.	..	..	..	Clear.
	6 25	2.5	766.15	30.149	26.3	25.	.142	9 A. M.: 28.1	86.	W.	..	..	..	Clear.
	8 25	3.4	767.50	30.197	30.	28.1	.154	(D. 25.6)	82.9	W.	..	..	2	Light Ci. and Ci-s.
	10 25	4.1	767.90	30.210	34.1	31.7	.173	(A. 32.3)	76.5	NW.	..	..	1	Light Ci. and Ci-s.
	12 25	6.	767.40	30.174	37.	32.1	.144	3 P. M.: 33.8	75.	S.	..	..	1	Ci.
	14 25	7.	766.40	30.137	36.3	33.8	.161	(D. 31.6)	71.5	SSW	..	..	3	Ci.
	16 25	6.9	765.60	30.105	37.	32.7	.155	(A. 38.5)	76.	SW.	..	..	7	Ci cu, Ci, Cu-s.
	18 25	6.8	765.00	30.081	34.8	31.5	.162	9 P. M.: 30.8	79.2	S. by E.	..	..	1	Hazy. Cu-s. in Hor.
	20 25	6.3	764.70	30.073	33.1	30.8	.167	(D. 28.5)	84.	S.	..	..	..	Hazy, stars nearly obscured.
	22 25	5.5	763.05	30.011	32.	30.5	.174	(A. 33.)	91.	S.	Hazy, stars nearly obscured.

• Recorded 53.

January.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Day.	Date.		Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaucourt's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
	Hour.	A. M.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
27	0	25	5.2	762.15	29.977	33.7	32.	.182	3 A. M.: (D. 31.8)	88.2	SW. by S.	..	..	8	N. (?)
	2	25	4.7	761.35	29.949	32.8	31.6	.184	(A. 33.6)	81.4	SSW.	..	..	8	N., very dark.
	4	25	4.4	769.76	29.887	34.	32.5	.186	9 A. M.: (D. 36.)	91.6	SW.	..	..	8	N., very dark.
	6	25	4.2	759.35	29.872	34.8	33.8	.201	9 A. M.: (D. 36.)	91.6	SW.	..	..	8	N.
	8	25	4.4	758.55	29.840	37.4	37.	.234	(A. 40.)	91.	SW.	..	..	7	Cu, Ci cu., N.
	10	25	5.	758.40	29.831	40.3	39.6	.263	..	92.	SW.	..	..	8	Ci cu., N.
	12	25	5.6	757.25	29.784	41.6	40.8	.263	..	91.5	SW.	..	..	8	Ci cu., N.
	14	25	6.2	756.30	29.718	42.5	41.6	.270	..	91.5	SW.	..	..	8	Ci cu., N.
	16	25	6.5	756.40	29.746	42.	41.3	.269	..	92.	SW.	..	..	8	N.
	18	25	7.	756.70	29.755	39.5	39.3	.256	9 P. M.: (D. 27.)	95.	SW.	..	..	..	A little Ci. in S.
	20	25	6.5	757.25	29.780	37.1	36.8	.233	(A. 36.8)	94.5	SW. by W.	..	..	..	Clear.
	22	25	6.	758.20	29.819	34.5	34.3	.214	3 A. M.: (D. 33.3)	95.	SW. by W.	..	..	1	Ci cu. (?)
	0	25	5.7	759.10	29.855	36.	35.5	.220	9 A. M.: (D. 34.4)	93.2	W.	..	..	1	Cu s. (?)
	2	25	5.3	759.95	29.891	37.8	36.5	.219	(D. 33.3)	91.9	NW. by N.	..	..	..	Cu s. (?)
	4	25	5.	761.05	29.935	37.	36.	.219	9 A. M.: (D. 33.)	88.2	NNW.	..	..	6	Clear.
	6	25	4.8	762.15	29.980	36.	34.7	.204	9 A. M.: (D. 33.)	88.2	NNW.	..	..	3	Ci, N., S.
28	8	25	5.6	763.60	30.033	38.2	35.4	.193	(A. 38.5)	83.5	NW. by W.	..	..	3	Ci, S.
	10	25	6.4	765.00	30.084	40.8	37.1	.197	3 P. M.: (D. 33.4)	80.	NW. by W.	..	..	3	Ci, Ci cu.
	12	25	8.2	765.05	30.076	43.6	39.5	.213	9 P. M.: (A. 43.5)	75.	N.	..	..	3	Ci, Cu., Ci cu.
	14	25	9.8	765.25	30.078	44.5	38.5	.183	(D. 33.4)	73.	NW.	..	..	4	Ci, Ci s.
	16	25	9.2	766.00	30.110	41.7	38.	.204	9 P. M.: (D. 27.)	74.5	NW.	..	..	7	Ci, S, Ci s.
	18	25	8.6	766.65	30.139	37.5	34.9	.191	(D. 27.)	81.2	NW.	..	..	8	Ci, S, N. (?)
	20	25	7.7	767.60	30.180	33.	31.5	.181	..	88.5	E. by S.	..	..	..	Hazy.
	22	25	6.8	767.80	30.193	32.7	31.6	.185	(A. 33.)	90.	E. by S.	..	..	..	Hazy.

January.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hyg., percentage.	Wind.		Rain, inches.	Sky covered, Sths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
29	0	6.2	767.30	30.175	31.4	30.7	.163	3 A. M.: (D. 27.1)	83.9	S. by W.	..	..	..	Clear.
	2	5.6	766.85	30.161	30.5	30.	.181	(A. 31.)	94.4	S. by W.	..	..	3	Ca-s. (?)
	4	3.1	766.55	30.164	33.7	31.9	.191	9 A. M.: (D. 31.3)	91.5	ENE.	..	..	8	(?)
	6	4.8	766.45	30.149	33.	33.	.199	3 P. M.: (A. 35.6)	93.	ENE.	..	..	8	N.
	8	4.7	765.60	30.116	33.2	32.8	.200	(D. 35.)	93.5	ENE.	..	.01	8	N., raining.
	10	4.5	764.45	30.072	35.	34.4	.210	3 P. M.: (D. 38.5)	93.6	E.	..	.07	8	N., raining.
	12	4.7	762.80	29.982	35.6	35.	.215	(A. 31.)	92.	ENE.	..	.10	8	N., raining.
	14	4.7	758.60	29.849	35.3	35.1	.220	(D. 35.)	94.	ENE.	..	.11	8	N., raining.
	16	4.7	758.40	29.833	35.5	35.3	.222	(A. 35.6)	95.1	NNW.	1	.02	8	N., raining.
	18	4.7	758.10	29.821	35.	34.6	.215	9 P. M.: (D. 38.5)	94.9	N.	1	..	8	N.
	20	5.	759.20	29.862	34.1	33.6	.205	(D. 38.5)	95.	ENE.	..	..	8	Foggy.
	22	4.7	760.45	29.914	34.	33.5	.204	(A. 31.)	93.	NNW.	..	..	8	N.
	24	4.7	761.80	29.943	34.	33.6	.206	3 A. M.: (D. 33.2)	95.	NW. by N.	..	..	8	N.
	2	4.7	761.40	29.951	33.6	33.5	.209	(D. 33.2)	95.	WSW.	..	..	8	Hazy in Hor.
	4	4.4	761.70	29.964	33.	33.	.207	(A. 33.6)	93.	WSW.	..	..	8	(?)
	6	4.3	762.00	29.925	31.2	31.2	.194	9 A. M.: (D. 32.8)	91.7	SW.	..	..	8	Dense fog.
	8	4.3	762.40	29.991	33.2	32.7	.198	(D. 32.8)	94.	SW. by W.	..	..	8	Ca-s. and N.
30	10	4.3	762.75	30.005	36.6	35.1	.205	(A. 34.6)	88.	SW.	..	..	8	Ca-s. and N.
	12	4.8	761.50	29.955	40.1	35.	.164	3 P. M.: (D. 30.)	72.	WSW.	..	..	8	Ca-s. and N.
	14	5.1	761.15	29.939	39.7	34.	.149	(D. 30.)	69.	W. by S.	1	..	8	Ca-s. and N.
	16	5.2	761.35	29.946	38.9	35.4	.185	(A. 39.5)	70.3	W. by S.	1	..	8	Ca-s. and N.
	18	5.	763.60	29.996	37.1	34.	.218	9 P. M.: (D. 27.5)	72.8	W. by S.	..	..	8	S. around Hor.
	20	4.7	764.00	30.053	36.	29.5	.115	(D. 27.5)	93.	W.	..	..	..	Clear.
	22	4.2	754.70	29.081	33.6	27.6	.108	(A. 35.5)	62.5	WNW.	..	..	..	Clear.

February.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Day.	Hour.	Temperature, centigrade.	Barometer.		Therm'ms, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gausse's.	Wind.		Rain, inches.	Sky covered, Sols.	Clouds, &c
			Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
1	0	2.8	758.60	29.858	30.	29.4	.176	3 A. M.: (D. 29.5)	93.	SW. by S.	..	..	7	Cl., Ci-a.
	2	2.6	758.50	29.848	30.5	30.	.181	(A. 30.4)	94.	SW. by W.	..	..	8	N.
	4	2.4	757.60	29.818	30.5	30.	.181	9 A. M.: (D. 30.3)	94.2	W. by S.	..	..	8	N.
	6	2.4	757.75	29.819	31.	30.7	.187	9 A. M.: (D. 30.3)	94.3	S. by W.	..	..	8	N.
	8	2.5	757.10	29.793	31.7	31.2	.189	(D. 30.3)	94.5	WNW.	..	..	8	N., snowing a little.
	10	2.7	756.30	29.721	34.2	32.5	.184	(A. 32.4)	89.5	NE. by N.	..	.01	8	N., raining.
	12	2.9	753.50	29.610	33.	32.4	.195	3 P. M.: (D. 31.3)	92.6	ENE.	..	.02	8	N., rain and hail.
	14	2.8	748.50	29.453	33.2	31.9	.196	(D. 31.3)	93.	NE.	..	.11	8	N., raining hard.
	16	2.7	743.50	29.256	33.2	33.	.205	(A. 32.2)	93.	ENE.	6	.28	8	N., raining hard.
	18	3.	742.50	29.215	34.	33.9	.212	9 P. M.: (D. 31.4)	93.	N.	..	.21	8	N., raining hard.
	20	3.	743.70	29.263	33.5	33.2	.205	(D. 31.4)	92.5	N.	..	.06	8	N., raining hard.
	22	3.	746.20	29.361	31.2	30.2	.177	(A. 32.2)	88.5	NNW.	..	.03	8	N., Ci-cu.
	0	2.8	749.45	29.490	32.	31.5	.191	3 A. M.: (D. 30.8)	90.1	NW.	..	..	8	N.
	2	2.7	750.95	29.550	32.	31.5	.191	(D. 30.8)	90.1	W. by N.	..	..	1	Cu., Cu-a.(?)
	4	2.7	752.40	29.607	33.	31.5	.181	(A. 32.)	85.9	WNW.	..	..	..	Clear.
	6	2.6	754.20	29.679	31.	29.3	.164	9 A. M.: (D. 27.5?)	84.3	NW.	..	..	6	Cu., Ci., Ci-cu.
2	8	2.5	756.50	29.769	30.5	29.3	.153	(D. 27.5?)	83.	WNW.	..	..	8	Ci-cu., Cu.
	10	2.6	757.75	29.819	31.4	28.	.139	(A. 31.)	75.5	NW.	..	..	8	Ci-cu.
	12	3.2	757.00	29.784	32.9	29.9	.155	3 P. M.: (D. 28.3)	74.	N.	..	..	8	Ci-cu., N.
	14	3.5	756.00	29.743	33.8	30.3	.153	(D. 28.3)	76.	NE.	..	..	8	Ci-cu., Cu., N.
	16	3.9	756.80	29.735	33.8	31.	.164	(A. 34.5)	77.	W.	..	..	8	Ci-cu., N.
	18	4.	756.10	29.746	32.6	30.6	.170	9 P. M.: (D. 31.)	81.	ENE.	..	..	8	Ci-cu.
	20	4.	756.25	29.713	34.6	32.	.173	(D. 31.)	88.	S.	..	..	7	Ci-cu.
	22	4.	754.65	29.690	34.	33.3	.201	(A. 34.)	92.	SSW.	..	..	1	Cu., Ci-cu.

February.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

Day.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature.	Obs'd height.	millimetres.	Corr. height.	inches.				Dir. points.	Force, lbs.			
3	A. m.													
	0 25	8.6	753.45		29.643		32.1	32.	198	8 A. M.: SW.			1	Cl., Ci-a.
	2 25	8.5	752.75		29.616		32.	32.	199	SW.			6	Clear.
	4 25	8.2	752.35		29.602		32.2	32.	197	SW. by S.			1	Cl., Ci-a.
	6 25	8.	752.00		29.580		31.5	...	...	WSW.			1	Cl., Cu-a. (?)
	8 25	8.4	752.25		29.598		32.2	32.2	156	SW.			7	Cu.
	10 25	4.	754.00		29.664		40.5	37.7	313	WSW.	1		1	Cu., Ci cu.
	12 25	5.6	755.75		29.725		38.2	32.	137	WNW.	4		1	Clear.
	14 25	6.3	757.00		29.770		38.	39.5	114	WNW.	2		...	Clear.
	16 25	6.3	758.85		29.843		35.	27.8	100	WNW.	1		...	Clear.
4	18 25	5.3	760.50		29.913		32.	26.4	107	WNW.			...	Clear.
	20 25	4.3	762.40		30.000		30.	24.5	96	WNW.			...	Clear.
	22 25	3.8	763.55		30.039		28.	23.3	98	WNW.			...	Clear.
	0 25	3.	763.80		30.053		26.3	23.6	104	W.			1	A little Ci-cu. in S.
	2 25	2.4	764.90		30.096		27.7	24.	111	WNW.	2		8	Cl., Ci-cu. in S. and W.
	4 25	1.8	765.30		30.114		26.	23.	114	WNW.	2		3	Cl., Ci-a.
	6 25	1.2	766.70		30.177		23.4	22.2	128	WSW.			4	Cl-a.
	8 25	1.5	768.55		30.249		26.6	22.3	97	W.			4	Cl., Ci-a.
	10 25	2.	769.00		30.263		28.2	23.2	94	WNW.	1		2	Cl.
	12 25	2.9	768.00		30.220		30.3	24.5	93	NNW.			4	Cl.
5	14 25	3.8	767.40		30.191		30.8	25.	96	W.			5	Cl.
	16 25	3.5	767.10		30.180		29.6	24.5	100	WNW.			6	Cl., Ci-a.
	18 25	3.	767.10		30.183		27.4	24.	114	W.			...	Very hazy, no clouds.
	20 25	2.7	766.90		30.177		26.6	23.5	116	NNW.			...	Hazy, no clouds.
	22 25	1.8	766.25		30.156		25.5	23.2	122	N.			3	Cl., Ci-a., halo around moon.

February.]

DAILY METEOROLOGICAL OBSERVATIONS.

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Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saunures's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
9	4. m.	1.3	766.00	30.148	23.6	22.4	.129	.....	72.8	N. by W.	..	..	9	Cl., Ci-a., halo.
	0 25	0.8	761.55	30.094	23.1	21.5	.121	.....	83.1	N. by W.	..	..	8	Cl., Ci-a.
	2 25	0.7	764.10	30.076	23.	21.	.114	.....	80.1	N. by W.	..	..	8	N.?
	4 25	0.1	764.70	30.104	21.5	20.	.114	.....	81.	N. by W.	..	..	8	Cl., Ci-a., Cu., Ci-cu.
	6 25	0.1	763.75	30.066	23.5	21.7	.115	.....	81.	ENE.	..	..	1	Cl., Ci-a., Cu., Ci-cu.
	8 25	0.2	763.80	30.062	29.8	27.	.139	.....	80.	NNE.	..	..	1	Cl. cu. in Hor.
	10 25	1.2	762.10	29.984	34.	30.2	.148	.....	77.	ENE.	..	..	1	Cl. cu. in Hor.
	12 25	3.2	760.60	29.921	36.6	32.	.153	.....	76.5	ENE.	..	..	2	Cl., Cu.
	14 25	4.4	760.40	29.909	34.3	31.8	.173	(D. 22.8)	77.6	ENE.	..	..	4	Cl., Ci-cu., Cu.
	16 25	5.2	760.10	29.900	30.2	27.8	.148	(A. 38.)	82.	ENE.	..	..	3	Cl., Ci-cu., Cu.
6	18 25	4.6	759.65	29.887	29.6	28.2	.160	(D. 24.3)	87.	E.	..	..	4	Cl., Ci-cu., Cu.
	20 25	3.7	759.60	29.885	28.8	27.6	.158	(A. 28.8)	89.	NE.	..	..	..	Clear.
	22 25	3.7	759.15	29.870	28.	27.	.157	3 A. M.: ..	91.	ENE.	..	..	8	Ci-cu.
	0 25	3.1	759.20	29.872	29.3	28.3	.165	(D. 22.)	91.	N.	..	..	8	Ci-cu.
	2 25	3.	758.55	29.818	29.	28.	.163	(A. 29.)	91.	NE.	..	..	8	Ci-cu.
	4 25	2.8	758.80	29.857	29.6	28.6	.167	9 A. M.: ..	91.8	N. by E.	..	..	8	Ci-cu.
	6 25	3.	758.20	29.872	30.8	29.8	.174	(D. 28.4)	92.	ENE.	..	..	8	Ci-cu., N.
	8 25	3.	759.20	29.885	35.	31.8	.166	(A. 33.)	87.	S.	..	..	9	Cl., Ci-cu.
	10 25	3.7	759.60	29.854	40.	37.	.204	3 P. M.: ..	84.	SSW.	..	..	8	Cl., Ci-cu.
	12 25	4.9	759.00	29.859	40.2	37.3	.208	(D. 33.)	83.5	SW.	..	..	7	Cl., Cu., Ci-cu.
1	14 25	5.7	759.20	29.863	39.1	37.1	.217	(A. 40.)	85.	SSW.	..	..	8	Ci-cu., N.
	16 25	5.8	759.30	29.863	36.6	34.5	.195	9 P. M.: ..	85.5	NNW.	..	..	8	Ci-cu., N.
	18 25	6.3	760.40	29.904	36.4	34.2	.190	(D. 33.)	86.	NNW.	..	..	8	Ci-cu., N.
	20 25	6.	761.00	29.928	36.4	34.2	.186	(A. 35.)	89.5	NNW.	..	..	1	Cl.
	22 25	5.6	761.40	29.947	34.	32.5	.186	(A. 35.)	89.5	NNW.	..	..	1	Cl.

Day.	Date.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
8	A. M.	3.3	766.00	30.138	29.8	27.	.139	3 A. M.:	92.1	NNW.	..	..	1	Cl., S.
	0 25	2.7	766.45	30.159	27.6	25.5	.127	(D. 18.9)	92.5	NNW.	..	..	..	Clear.
	2 25	2.	767.10	30.188	27.	24.9	.133	(A. 27.5)	80.8	NNW.	..	..	..	Clear.
	4 25	1.4	767.55	30.209	26.	23.7	.125	..	81.4	NNW. by N.	..	..	4	S.
	6 25	1.3	768.50	30.247	27.	24.5	.127	..	79.5	NNW.	..	..	4	Cl., S.
	8 25	1.3	768.50	30.247	27.	24.5	.127	..	77.	NNW.	..	..	1	Cl., S.
	10 25	2.6	769.00	30.261	30.8	27.1	.129	..	77.	NNE.	..	..	1	Cl., S.
	12 25	4.3	769.50	30.233	33.6	29.	.132	..	75.	NNE.	..	..	1	Cl., S.
	14 25	5.7	767.75	30.196	35.1	31.3	.155	..	72.	NNW.	..	..	4	Cl.
	16 25	5.7	767.25	30.176	35.	30.	.135	..	70.5	N.	..	..	4	Cl.
	18 25	5.1	767.30	30.181	31.5	30.5	.179	9 P. M.:	77.	NE. by E.	..	..	7	Cl., S.
	20 25	4.5	767.00	30.172	29.3	27.1	.145	(D. 20.5)	81.5	NE. by E.	..	..	4	Cl., S.
9	22 23	4.	766.80	30.168	26.7	25.7	.149	(A. 27.2)	89.	NE. by N.	..	..	1	Cl.
	0 25	3.2	766.20	30.146	27.6	26.6	.154	3 A. M.:	90.5	NNW. by W.	..	..	6	Cl.
	2 25	2.6	764.70	30.092	28.	27.5	.165	(D. 25.3)	91.1	ENE.	..	..	8	Cl., S.
	4 25	2.5	761.35	30.078	28.	27.5	.165	(A. 28.)	94.	NE. by E.	..	..	8	Cl.
	6 25	2.2	762.75	30.016	28.7	28.2	.169	9 A. M.:	91.	E by S.	..	..	8	Cl., S.
	8 25	2.2	761.80	29.979	29.6	28.7	.164	(D. 24.5)	93.	NE. by N.	..	..	8	Cl., S.
	10 25	2.4	760.45	29.925	31.2	29.4	.164	(A. 30.2)	88.5	E.	..	..	8	Cl., S.
	12 25	2.9	759.05	29.867	31.9	30.9	.182	3 P. M.:	92.5	E.	..	..	8	Cl., S.
	14 25	3.	757.30	29.798	31.4	31.	.188	(D. 31.)	93.	NE. by E.	..	..	8	N., snowing.
	16 25	3.2	756.10	29.748	32.1	31.6	.191	(A. 32.)	93.	NE.	..	..	8	N., snowing fast.
	18 25	3.2	756.80	29.776	31.8	31.6	.194	9 P. M.:	94.	NNE.	..	..	8	N., snowing fast.
	20 25	3.2	756.65	29.770	30.5	30.1	.192	(D. 29.2)	94.	NNW.	..	..	8	N., snowing fast.
	22 25	3.	756.75	29.776	30.3	30.	.183	(A. 30.5)	94.	NW.	..	..	8	N., snowing fast.

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaumure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
10	A. M.													
	0 25	2.8	755.10	29.712	29.6	28.5	.165	3 A. M.: (D. 25.)	89.2	NW.	..	..	2	Cl., Cu. Clear.
	2 25	2.2	756.05	29.752	28.5	26.1	.142	(A. 28.)	81.9	WNW.	..	..	..	Clear.
	4 25	1.9	756.85	29.785	28.5	23.5	.127	10 A. M.: (A. 28.)	80.9	WSW.	..	..	..	Clear.
	6 25	1.3	757.25	29.804	29.6	19.1	.110	(D. 23.8)	81.	WSW.	..	..	4	Cl., Cu. cu.
	8 25	1.6	756.70	29.781	22.6	21.2	.121	(A. 28.)	77.	WSW.	..	..	1	Cl., Cu. cu.
	10 25	3.	756.60	29.770	28.3	26.	.138	3 P. M.: (A. 28.)	72.	WSW.	..	..	5	Cl., Cu. cu.
	12 25	4.7	756.15	29.744	33.2	30.6	.164	(D. 22.8)	71.	WNW.	2	..	2	Cu., Cu. cu.
	14 25	4.5	756.15	29.745	28.8	24.8	.114	(A. 28.8)	63.8	WNW.	3	..	2	Cu., Cu. cu., Cu-s. (?)
	16 25	3.1	757.90	29.822	26.5	22.5	.102		64.	WNW.	..	..	..	Clear.
11	18 25	2.3	759.50	29.898	21.5	17.8	.081		65.	WNW.	2	..	..	Clear.
	20 25	1.2	760.65	29.939	17.6	15.	.081		65.2	WNW.	..	..	..	Clear.
	22 25	0.	761.15	29.984	14.6	12.4	.076		65.6	NW.by W.	..	..	..	Clear.
	0 25	-1.7	761.65	29.992	13.5	12.	.081		66.5	NW.by W.	..	..	..	Clear.
	2 25	-2.8	761.15	29.977	11.5	10.	.074		68.	NW.by W.	..	..	..	Clear.
	4 25	-3.8	760.95	29.976	9.5	8.4	.073		69.1	SW.	..	..	..	Clear.
	6 25	-4.6	760.95	29.979	6.5	5.5	.065		68.5	W.	..	..	..	Clear.
	8 25	-4.2	761.15	29.993	9.8	8.3	.069		64.	WNW.	..	..	..	Clear.
	10 25	-3.5	760.70	29.964	12.4	10.	.065		65.3	NW.	..	..	1	Light Cl. and Cl-s.
	12 25	-2.	759.25	29.898	13.8	11.3	.069		65.5	WNW.	..	..	1	Cu., Cl-cu., Cu-s.
12	14 25	-1.5	758.10	29.851	14.8	12.3	.072		66.5	WNW.	..	..	5	Cu., Cl., Cl-s.
	16 25	-2.	758.75	29.879	13.8	11.4	.070		64.	WNW.	..	..	4	Cl., Cu. in S.
	18 25	-3.4	759.75	29.925	10.8	8.3	.059		65.5	WNW.	..	..	..	Clear.
	20 25	-4.4	760.90	29.976	8.5	6.7	.061		68.	WNW.	Clear.
	22 25	-5.8	761.20	29.994	6.6	5.2	.081			WNW.	Clear.

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DAILY METEOROLOGICAL OBSERVATIONS.

FEBRUARY.]

Day.	Date.	Barometer.			Therm°rs, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
12	4 th													
	0 25	-6.9	761.45	30.009	5.	4.	.061	.....	68.	WNW.	..	..	..	Clear.
	2 25	-8.	760.80	29.989	4.1	3.1	.059	.....	69.	WNW.	..	..	..	Clear.
	4 25	-8.8	760.30	29.970	3.	2.	.056	.....	70.	NW. by W.	..	..	..	Clear.
	6 25	-9.5	760.00	29.964	1.9	1.4	.060	.....	71.7	WNW.	..	..	..	Clear.
	8 25	-9.	760.25	29.972	4.5	3.8	.064	.....	71.	WNW.	..	..	..	Clear.
	10 25	-7.8	760.30	29.964	8.	6.8	.067	.....	69.5	WNW.	1	..	..	Clear.
	12 25	-6.5	758.80	29.902	10.2	8.4	.066	.....	67.	WNW.	1	..	2	Cu., Ci., Ci-a.
	14 25	-5.5	757.80	29.860	12.2	9.6	.062	.....	66.	WNW.	1	..	6	Cu., Ci., Ci-cu.
	16 25	-5.5	758.00	29.867	10.4	9.5	.079	.....	72.	W. by N.	..	..	6	Cu., Ci., Ci-cu.
	18 25	-6.4	758.50	29.890	8.3	7.	.067	.....	71.	W. by N.	..	..	1	Cu., Ci., Ci-cu.
13	20 25	-7.	758.70	29.901	7.2	6.1	.066	.....	71.	W.	..	..	..	Clear.
	22 25	-7.5	758.50	29.896	7.6	6.5	.067	.....	69.	W. by N.	..	..	..	Clear.
	0 25	-8.2	758.00	29.878	6.5	5.5	.065	.....	71.	WNW.	..	..	..	Clear.
	2 25	-8.9	757.65	29.870	6.1	5.1	.064	.....	71.2	WNW.	..	..	..	Clear.
	4 25	-9.3	757.50	29.885	5.6	4.7	.064	.....	71.7	W. by N.	..	..	..	Clear.
	6 25	-9.8	757.40	29.863	6.4	5.5	.066	.....	72.	WSW.	..	..	4	S.
	8 25	-9.	757.55	29.866	7.8	6.7	.068	.....	71.	W. by S.	..	..	3	Ci., Ci-cu.
	10 25	-8.	757.40	29.855	12.	10.2	.072	.....	69.5	W. by N.	2	..	2	Ci., Ci-cu.
	12 25	-6.2	757.00	29.830	16.5	13.	.075	.....	68.	WNW.	2	..	1	Ci., Ci-cu.
	14 25	-5.	756.80	29.817	17.1	14.4	.078	.....	68.	W. by N.	2	..	..	Clear.
	16 25	-4.2	757.20	29.828	17.8	14.8	.077	.....	68.	W. by N.	2	..	..	Clear.
	18 25	-5.	757.60	29.849	16.	13.7	.079	.....	70.	W. by N.	..	..	1	Cu., Ci-cu.
20 25	20 25	-5.2	757.75	29.856	13.	11.7	.082	.....	73.5	W. by S.	..	..	..	Clear.
	22 25	-5.7	758.10	29.871	14.7	13.3	.087	75.	WSW.	8	N.

FEBRUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

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Day.	Hour.	Barometer.			Therm in, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
		Temperature, centigrade.	Old height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
15	4. 25	-4.9	754.70	29.735	13.8	13.	.092	.....	75.1	NNW.	1	..	..	Clear.
	6 25	-5.7	754.70	29.736	13.5	12.6	.089	.....	75.2	NNW.	3	..	..	Cu., Cu-s.
	8 25	-6.4	754.15	29.719	12.	11.6	.091	.....	77.9	NNW.	2	..	..	Cu s.
	10 25	-6.8	754.65	29.741	13.	12.5	.093	.....	76.9	NNW.	1	..	..	Ci s., Cu-s.
	12 25	-6.5	757.25	29.841	13.7	12.1	.081	.....	76.	NNW.	..	..	..	Clear.
	14 25	-5.	758.50	29.884	15.8	13.8	.083	.....	73.6	NNW.	1	..	..	Cu., Ci cu.
	16 25	-3.7	758.10	29.861	18.6	15.7	.081	.....	72.	NNW.	3	..	..	Ci., Cu., Ci cu.
	18 25	-3.	757.90	29.851	20.5	17.3	.085	.....	70.	NNW.	4	..	..	Cu., Ci cu.
	20 25	-3.	758.30	29.866	20.8	17.6	.088	.....	70.	NNW.	3	..	..	Cu., Ci cu.
	22 25	-3.5	759.45	29.914	18.2	16.4	.095	.....	72.7	W.	..	..	..	Clear.
	0 25	-4.	760.00	29.937	16.2	15.	.095	.....	74.	SW.	..	..	..	Clear.
	2 25	-4.5	760.40	29.958	14.	13.	.090	.....	75.5	WSW.	..	..	..	Clear.
	4 25	-5.	760.50	29.963	15.3	14.	.091	.....	77.5	SW.	..	..	..	A slight haze.
	6 25	-5.3	760.75	29.974	14.5	13.5	.092	.....	78.2	SW.	..	..	..	Cu., S.
	8 25	-5.6	760.35	29.960	14.5	13.6	.093	.....	77.9	SW by W.	..	..	..	Cu.
	10 25	-5.9	760.30	29.959	15.6	14.4	.093	.....	78.1	SW.	..	..	..	Ci cu.
16	12 25	-5.	760.50	29.963	20.1	18.1	1.00	.....	76.5	SW by W.	..	..	..	Ci., Ci cu., Cu s.
	14 25	-3.4	760.50	29.955	26.2	22.6	.105	.....	72.	WSW.	..	..	..	Ci., Ci cu., Cu-s.
	16 25	-1.7	759.60	29.911	25.8	25.1	.108	.....	69.5	WSW.	..	..	..	Ci., Ci cu., Cu-s.
	18 25	-0.3	758.00	29.841	32.5	26.8	.108	.....	66.5	WSW.	..	..	..	Ci., Ci cu., Cu s.
	20 25	1.	757.20	29.803	32.8	27.8	.122	.....	67.5	WSW.	..	..	..	Ci., Ci cu., Cu s.
	22 25	1.	756.70	29.783	29.	26.4	.137	9 P. M.	72.	SW.	..	..	..	Ci., Ci cu., Cu-s.
	0 25	0.7	756.25	29.767	26.5	21.5	.132	(D. 18.2)	78.	S. by W.	..	..	..	Ci cu. (?)
	2 25	0.5	755.10	29.723	28.3	25.8	.135	(A. 27.)	78.	S.	..	..	..	Ci cu. (?)

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

FEBRUARY.]

Day.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saunures's.	Wind.		Rain, inches.	Sky covered, Sths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
17	h. m.													
	0 25	0.6	754.50	29.700	29.	26.5	.139	.....	79.	S. by E.	..	..	8	N. (?)
	2 25	0.5	752.80	29.633	29.3	26.8	.140	.....	80.	SE.	..	..	6	Ca. and N. (?)
	4 25	0.5	751.95	29.599	80.	27.6	.146	.....	81.1	SE.	..	..	8	N. (?)
	6 25	0.6	752.10	29.605	80.	27.5	.136	9 A. M.: 25.	82.2	S. by E.	..	..	3	Ca., Cu., Ci-ca.
	8 25	0.7	752.60	29.624	29.	27.5	.155	(D. 26.3)	85.	NW.	..	..	8	Ci-ca., N.
	10 25	1.8	752.80	29.608	35.4	31.4	.155	(A. 31.5)	76.5	WSW.	..	..	8	Ci-ca., Ci., N.
	12 25	3.2	753.20	29.635	39.4	34.	.154	3 P. M.: 34.	72.5	S.	..	..	8	N.
	14 25	3.8	753.10	29.628	36.7	32.5	.156	(D. 27.3)	75.2	ENE.	..	..	8	N.
	16 25	4.3	754.60	29.686	36.7	32.7	.159	(A. 37.)	76.	NNE.	..	..	7	Ci-ca., N.
18	18 25	4.1	756.00	29.741	35.6	31.9	.162	9 P. M.: 31.9	77.	NNE.	..	..	8	N.
	20 25	3.8	757.75	29.811	34.4	31.7	.170	(D. 24.)	82.5	NE.	..	..	8	N. (?)
	22 25	3.5	758.80	29.853	32.3	29.5	.154	(A. 33.5)	82.	NE.	..	..	8	N. (?)
	0 25	3.5	759.75	29.891	29.5	26.6	.135	.....	81.1	NE.	..	..	8	N. (?)
	2 25	2.7	760.80	29.937	26.	24.	.129	.....	81.1	NE.	..	..	..	Clear.
	4 25	1.9	762.25	29.997	24.2	23.3	.123	.....	81.1	N. by E.	..	..	8	N.
	6 25	1.3	762.75	30.020	24.3	22.1	.118	.....	80.2	NE. by N.	..	..	8	N.
	8 25	1.1	763.20	30.038	24.4	21.7	.111	.....	78.7	NE.	..	..	8	Ci-ca., N., Cu-a.
	10 25	1.1	763.40	30.016	26.3	23.2	.114	.....	77.2	NNE.	..	..	8	Ci-ca., N., Cu-a.
	12 25	1.8	762.75	30.018	27.4	24.4	.122	4 P. M.: 24.4	77.	NNE.	..	..	8	Ci-ca., N., Cu-a.
19	14 25	3.	761.75	29.973	30.2	27.2	.138	(D. 17.8)	77.	NW.	..	..	3	Cu., Ci., Ci-ca.
	16 25	3.9	761.00	29.939	32.1	28.1	.132	(A. 31.8)	75.	SW. by W.	..	..	..	Heavy around Hor.
	18 25	3.6	761.00	29.940	27.6	24.6	.126	9 P. M.: 24.6	81.	S.	..	..	..	Heavy.
	20 25	3.	759.70	29.892	27.5	25.7	.141	(D. 22.3)	82.5	S. by E.	..	..	..	Heavy.
	22 25	2.6	758.90	29.864	28.6	27.	.151	(A. 28.5)	84.5	S. by W.	..	..	8	(?)

Day.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussre's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temp'ature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
19	A. m.													
	0	2.4	757.90	29.825	29.8	27.	.154	3 A. M.: (D. 25.)	88.2	SSW.	...	...	8	(?)
	2	2.1	756.20	29.788	29.	26.8	.113	(A. 30.)	88.2	SSW.	...	...	8	Cu., Ci-cu.
	4	1.9	754.45	29.691	28.	27.	.157	9 A. M.: (D. 25.6)	91.1	SW. by S.	...	...	1	S.
	6	1.6	752.85	29.630	25.	24.5	.117	(A. 31.)	94.	SW. by S.	...	...	2	Ci., Ci-a.
	8	1.8	751.50	29.576	28.9	28.2	.167	(D. 25.6)	94.	SW.	...	...	6	Ci., Ci-cu., Ci-a.
	10	2.	750.50	29.535	32.	30.6	.176	(A. 31.)	91.	SW. by W.	...	...	8	Ci-cu., N., Ci-a.
	12	2.4	749.50	29.491	33.8	32.	.181	3 P. M.: (D. 27.8)	87.	W. by S.	...	...	8	Ci-cu., N., Ci-a.
	14	3.	749.50	29.491	38.	34.	.169	(A. 39.)	78.	W. by N.	...	...	8	Ci-cu., N., Ci-a.
	16	3.6	750.60	29.532	34.6	34.1	.165		76.5	NW.	...	...	6	Cu., Ci-cu., N.
20	18	3.4	752.40	29.604	38.4	...	...		71.3	NW.	...	...	2	Cu., Ci-cu., N.
	20	3.5	753.60	29.650	36.1	30.	.125		71.5	NW.	...	...	2	Cu., Ci-cu., N.
	22	3.	754.70	29.697	33.1	28.5	.130		66.5	NW.	...	...	...	Clear.
	0	2.2	755.50	29.711	31.	26.5	.119		70.7	NW.	...	...	...	Clear.
	2	1.9	756.15	29.757	29.2	25.	.113		70.7	NW.	...	...	...	Clear.
	4	1.8	756.25	29.764	26.	24.	.139		73.	NW.	...	...	...	Clear.
	6	0.8	756.45	29.775	23.6	21.	.108	10 A. M.: (D. 23.)	72.3	WNW.	...	...	...	Clear.
	8	2.	756.20	29.763	26.8	22.5	.099	(A. 31.5)	68.	WNW.	...	...	...	Clear.
	10	2.	755.35	29.726	32.3	26.3	.103		65.	W.	...	...	...	Clear.
	12	3.8	753.45	29.642	38.5	31.7	.129		60.	W. by N.	...	...	...	Clear.
21	14	4.6	752.30	29.594	40.6	32.3	.108		60.	W.	...	...	...	Ci., Ci-cu.
	16	6.	752.40	29.591	43.4	34.2	.112		67.	W. by S.	...	...	...	Ci., Ci-cu., Ci-a.
	18	6.	752.15	29.581	39.6	32.6	.126		62.	SW.	...	...	...	Ci., Ci-cu., Ci-a.
	20	5.6	751.91	29.570	35.	30.7	.147		71.5	SW.	Ci-cu.
	22	5.	751.70	29.568	35.2	30.2	.137		70.	SW.	Ci-cu.
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DAILY METEOROLOGICAL OBSERVATIONS.

FEBRUARY.]

Date.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
23	0	6.7	749.70	29.481	35.9	32.5	.165	3 A. M.: (D. 26.5)	77.2	N.	..	..	8	()
	2	6.3	749.05	29.458	35.	32.3	.171	(A. 34.)	79.	N.	..	..	8	()
	4	5.8	749.90	29.469	33.7	31.1	.167		81.2	N.	..	..	4	()
	6	5.2	750.95	29.502	33.6	30.5	.158	9 A. M.: (D. 26.6)	79.3	NNE.	..	..	..	Slight haze.
	8	5.	751.60	29.564	34.7	31.6	.165	(A. 35.5)	79.8	ENE.	..	..	8	Cl, Ci-cu., Ci-a.
	10	6.	751.50	29.555	37.5	34.5	.184		81.5	ENE.	..	..	6	Cl, Ci-a.
	12	7.3	751.25	29.539	41.6	38.	.206		79.8	NE.	..	..	6	Light Cl.
	14	8.9	750.40	29.498	45.1	40.6	.230		76.6	NNW.	..	..	2	S., hazy.
	16	10.2	750.55	29.498	44.8	39.4	.199		75.	NNW.	..	..	..	S., hazy.
	18	10.9	750.45	29.493	38.5	35.5	.193		82.	N. by E.	..	..	..	S., hazy.
	20	8.3	749.85	29.479	34.	32.5	.186		89.	NE. by E.	..	..	..	S., hazy.
	22	7.	748.75	29.443	31.	30.	.176		93.4	S.	..	..	..	Clear.
23	0	7.5	747.65	29.397	33.	30.5	.164	3 A. M.: (D. 38.6)	83.6	SW. by S.	..	..	..	Clear.
	2	5.9	746.95	29.377	31.1	29.7	.170		87.8	SW. by S.	..	..	..	Clear.
	4	5.2	745.45	29.321	31.	30.5	.174	(A. 31.4)	87.	SW.	..	..	..	Clear.
	6	4.8	744.76	29.394	32.9	31.	.173		85.9	S. by W.	..	..	..	Clear.
	8	5.5	744.75	29.291	36.1	34.	.191		86.	SW.	..	..	1	Cl-a.
	10	6.8	745.00	29.295	43.8	40.3	.233		80.	SSW.	..	..	3	Cl-a., Ci-cu.
	12	9.8	745.80	29.314	57.	51.5	.333		62.	WNW.	2	..	3	Cu., Ci cu.
	14	10.	747.70	29.387	44.8	39.2	.195		72.	N.	4	..	7	Cu., Ci cu.
	16	9.7	751.00	29.518	40.5	35.5	.170		74.3	NNE.	..	..	2	Cu., Ci-cu., Ci-a.
	18	8.6	755.25	29.691	34.	..	..		69.	NNE.	..	..	8	N.
	20	7.	756.75	29.757	29.5	..	..		63.5	NNE.	3	..	8	N.
	22	5.5	759.25	29.862	26.	..	..		63.5	NNE.	..	..	8	N.

Day.	Hour.	Barometer.			Therm'rs, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Sausures.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
24	0 25	4.	760.75	29.930	24.	20.	.088	.....	63.1	N.	.....	.....	8	N.
	2 25	3.2	762.40	29.996	22.6	18.7	.083	.....	61.1	NNE.	.....	.....	8	N.
	4 25	2.1	763.35	30.040	21.	18.8	.102	.....	64.9	NNE.	.....	.....	8	N.
	6 25	1.4	764.55	30.091	20.5	17.9	.094	.....	66.7	NNE.	.....	.....	8	N.
	8 25	1.3	765.00	30.108	20.	17.2	.069	.....	70.	E.	.....	.....	8	N., snowing.
	10 25	0.8	764.90	30.108	19.4	18.	.106	.....	78.6	ENE.	.....	.....	8	N., snowing.
	12 25	0.8	764.20	30.080	20.9	20.2	.123	3 P. M.: (D. 16.3)	87.	ENE.	.....	.....	8	N., snowing.
	14 25	1.	763.30	30.043	21.	20.	.119	(A. 22.4)	87.	NE. by N.	.....	.....	6	Cl., Cu., Ci cu.
	16 25	1.4	763.00	30.029	23.7	21.7	.118	.....	87.5	S. by W.	.....	.....	8	Very hazy.
	18 25	1.8	763.65	30.053	19.5	18.5	.112	.....	91.9	SSW.	.....	.....	..	Clear.
	20 25	0.2	764.00	30.075	16.6	16.4	.108	.....	94.	SSW.	.....	.....	..	Clear.
	22 25	-0.3	764.75	30.107	15.5	15.4	.107	.....	91.3	W.	.....	.....	1	Cl-s.
25	0 25	-1.2	764.65	30.107	14.9	14.9	.107	3 A. M.: (D. 11.8)	93.	W.	.....	.....	..	Clear.
	2 25	-2.1	764.90	30.121	19.1	.....	.....	(A. 12.)	93.	W.	.....	.....	..	Clear.
	4 25	-2.8	764.90	30.125	11.	.....	.....	.....	96.	W. by S.	.....	.....	..	Foggy.
	6 25	-3.2	765.35	30.145	11.	.....	.....	.....	93.6	WSW.	.....	.....	6	Cl., Ci s., Cu s. (?)
	8 25	-3.	766.00	30.169	15.7	15.7	.110	.....	93.	SW.	.....	.....	8	Cl., S.
	10 25	-2.	766.50	30.184	21.8	21.7	.137	.....	91.	SW.	.....	.....	7	Cl., S., Ci-cu.
	12 25	-0.6	768.00	30.157	25.8	25.2	.150	3 P. M.: (D. 21.6)	85.3	SW.	.....	.....	8	Cl., S., Ci-cu., Cu.
	14 25	0.5	765.00	30.112	30.3	28.6	.160	(A. 30.5)	85.	SW.	.....	.....	8	Cl., S., Ci-cu., S., N.
	16 25	1.	765.40	30.125	30.	28.5	.161	9 P. M.: (D. 28.)	90.	SW.	.....	.....	8	Hazy, S. (?)
	18 25	1.2	764.75	30.100	29.3	28.4	.166	(D. 28.)	89.	S.	.....	.....	8	Hazy, S. (?)
	20 25	1.5	764.20	30.077	30.	28.7	.164	(A. 30.)	89.	SSW.	8	Hazy, S. (?)
	22 25	1.3	764.30	30.061	30.2	29.	.167	89.	SSW.	8	Hazy, S. (?)

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DAILY METEOROLOGICAL OBSERVATIONS.

FEBRUARY.]

Day.	Hour.	Barometer.				Therm'ms, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saunure's.	Wind.		Rain, inches.	Sky covered, Sths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.		Dry.	Wet.				Dir. points.	Force, lbs.			
26	h. m.														
	0 25	1.2	764.30	30.082		30.5	29.9	.172	3 A. M.: (D. 27.8)	89.6	WSW.			8	N. (?)
	2 25	1.3	763.10	30.033		30.	29.4	.176	(D. 27.8)	91.8	SE.			8	N. (?)
	4 25	1.3	763.80	30.022		30.5	29.6	.174	(A. 30.2)	90.9	NE.			8	N. (?)
	6 25	1.4	763.45	30.047		31.1	30.	.175	9 A. M.: (D. 29.2)	90.2	NNE.			8	N., Ci-cu., Cu-s.
	8 25	2.	763.40	30.042		33.2	31.5	.179	(D. 29.2)	83.5	E.			8	N., Ci-cu., Cu-s.
	10 25	4.	763.40	30.033		33.8	31.5	.179	(A. 36.)	84.	W.			3	Hazy.
	12 25	6.1	762.75	29.997		43.	38.3	.195	3 P. M.: (D. 29.5)	77.	NNE.			3	Ci., Ci-s.
	14 25	7.7	761.80	29.932		46.6	41.2	.216	(D. 29.5)	70.5	SE.			3	Ci., Ci-s.
	16 25	8.5	761.40	29.932		46.3	40.8	.210	(A. 46.7)	70.	SW.			7	Ci., Ci-s., Ci-cu.
27	18 25	9.	761.70	29.943		41.	37.	.192	9 P. M.: (D. 36.)	75.4	SSW.			8	Ci., Ci-cu.
	20 25	9.	761.20	29.923		39.6	37.6	.230	(D. 36.)	87.	S by W.			8	N.
	22 25	8.7	759.90	29.873		38.3	37.	.223	(A. 38.8)	91.	S.			8	N.
	0 25	8.5	758.00	29.798		37.4	36.9	.231	3 A. M.: (D. 39.)	93.7	ESE.			8	N., raining.
	2 25	8.2	756.65	29.707		38.7	38.5	.249	(D. 39.)	92.3	SSE.			8	N., raining.
	4 25	8.5	753.95	29.639		41.	40.8	.270	(A. 39.)	92.	SSE.			8	N., raining.
	6 25	8.6	752.93	29.601		41.9	41.6	.277	9 A. M.: (D. 40.6)	91.6	SSW.			8	N., raining.
	8 25	8.6	752.70	29.589		41.7	41.6	.279	(D. 40.6)	91.5	SW.			8	N., dense fog.
	10 25	8.9	752.25	29.571		42.2	42.	.281	(A. 42.)	91.	W.			8	N., raining moderately.
	12 25	9.1	752.60	29.584		43.	42.	.272	3 P. M.: (D. 37.5)	89.	W.			8	N., Ci-cu.
28	14 25	9.	752.85	29.594		42.1	39.5	.231	(D. 37.5)	82.5	WNW.			7	N., Ci-cu., Cu.
	16 25	9.2	754.25	29.648		44.5	42.4	.264	(A. 43.5)	73.8	NW.			7	Ci., Ci-cu., Ci-s., N.
	18 25	9.8	756.25	29.724		42.1	42.	.282	.....	75.	NW.			3	Ci., Ci-cu., Ci-s., N.
	20 25	8.7	757.25	29.769		38.	38.	.246	.....	78.5	NW.			3	Clear.
	22 25	9.	758.30	29.808		32.1	31.8	.195	86.	SSW.			..	Clear.

March.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

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Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saunures.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade,	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
1	0	15	758.40	29.820	36.1	33.9	.188	3 A. M.: (D. 31.5)	81.8	SW.	...	...	5	Cl s., Cu.
	2	15	757.90	29.804	36.2	34.	.189	(A. 34.5)	82.3	SW. by S.	...	...	3	Cl s., Cu.
	4	15	757.05	29.773	32.5	31.5	.186	(A. 34.5)	90.	SW.	...	...	...	Hazy.
	6	15	756.70	29.762	31.5	31.	.187	...	91.8	SSW.	...	...	2	Cl., Cl-cu., Cl-s.
	8	15	757.15	29.779	37.5	36.1	.214	...	85.2	SW. by W.	...	...	7	Cl-cu.
	10	15	757.10	29.775	40.1	38.9	.229	...	...	SW.	...	...	3	Cl-cu.
	12	15	757.20	29.778	43.6	40.	.224	...	...	WSW.	...	...	2	Cl-cu.
	14	15	757.35	29.769	48.1	41.3	.201	...	...	W. by N.	...	...	...	Cl-cu.
	16	15	757.35	29.764	54.3	40.3	.166	...	54.	WNW.	...	...	...	No clouds, hazy.
	18	15	758.70	29.809	47.5	41.	.201	9 P. M.: (D. 37.5)	62.	W. by N.	...	...	...	No clouds, hazy.
	20	15	758.95	29.828	41.	40.5	.263	(A. 39.)	89.	S. by W.	...	...	...	Clear.
	22	15	758.90	29.831	36.8	34.5	.192	...	78.	W.	...	...	...	Clear.
	0	15	758.50	29.821	34.	33.6	.207	...	83.	S. by W.	...	...	...	Clear.
	2	15	758.55	29.827	32.1	30.1	.166	...	83.3	W. by S.	...	...	1	Cl s.
	4	15	758.70	29.837	32.4	29.6	.155	...	86.1	WSW.	...	...	1	Cl s. (?)
	6	15	758.95	29.848	30.9	30.	.177	...	90.	SSW.	...	...	8	Cl., Cl s., Cu.
2	8	15	760.20	29.896	37.9	35.	.190	...	78.2	NNW.	...	...	5	Cl., Cl-s.
	10	15	760.50	29.898	47.8	39.8	.173	...	63.5	N.	...	...	3	Cl., Cl-s.
	12	15	760.25	29.875	52.	42.5	.182	3 P. M.: (D. 41.8)	60.7	NE.	...	...	6	Cl.
	14	15	759.30	29.834	53.5	42.5	.197	(A. 41.8)	62.	E.	...	...	7	Cl.
	16	15	759.50	29.848	52.3	43.4	.198	(A. 42.7)	62.1	E.	...	...	8	Cl s.
	18	15	759.65	29.848	47.5	47.1	.394	9 P. M.: (D. 36.2)	70.5	ENE.	...	...	8	Cl., Cl-s.
	20	15	759.45	29.843	41.3	40.8	.264	(A. 41.5)	77.2	ENE.	...	...	5	Cl., Cl-s.
	22	15	758.60	29.814	40.1	40.	.263	...	81.9	ENE.	...	...	4	Cl., Cl-s.

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

Mascon.]

Day.	Hour.	Barometer.			Therm'rs, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
3	0 15	9.2	757.35	29.770	87.4	34.8	.191	.....	88.2	NE.	.....	.....	8	Cl., Ci-a., halo.
	2 15	8.4	756.80	29.752	85.8	33.6	.186	.....	87.6	NE.	.....	.....	8	Cl., Ci-a.
	4 15	7.4	755.90	29.722	85.2	33.	.182	.....	87.	NE. by N.	.....	.....	8	() Very dark.
	6 15	6.9	755.70	29.716	84.4	32.5	.182	9 A. M.:	88.7	NE. by N.	.....	.....	8	N. () and Ci.
	8 15	6.8	756.05	29.730	86.	33.5	.182	(D. 28.)	86.4	NE.	.....	.....	8	Cl., Ci-a., () ci.
	10 15	7.1	756.15	29.732	41.	37.5	.203	(A. 39.4)	82.1	NE.	.....	.....	5	Cl., Ci-a.
	12 15	9.8	754.50	29.657	47.5	41.3	.208	.....	76.	ENE.	.....	.....	3	Cl.
	14 15	10.7	754.75	29.662	49.	42.7	.216	.....	74.3	ENE.	.....	.....	2	Cl.
	16 15	11.3	754.30	29.611	49.1	42.6	.216	.....	72.8	ENE.	.....	.....	5	Cl.
	18 15	11.8	755.15	29.672	45.2	40.5	.216	9 P. M.:	76.2	NE.	.....	.....	8	Cl., Ci-cu., Ci-a.
	20 15	11.	755.95	29.706	42.	33.5	.212	(D. 35.)	80.2	NE.	.....	.....	6	Cl., Ci-cu., Ci-a.
4	22 15	10.	755.95	29.711	37.8	33.5	.201	(A. 38.)	87.	NE.	.....	.....	4	Cl.
	0 15	8.9	756.70	29.745	35.7	34.	.196	3 A. M.:	89.1	N.	.....	.....	7	Ci-a.
	2 15	8.	757.15	29.763	31.5	32.4	.179	(D. 28.)	87.2	N.	.....	.....	1	Ci-a.
	4 15	7.2	758.35	29.819	31.9	31.6	.163	(A. 35.)	82.4	NNE.	.....	.....	8	Ci-cu., Cu.
	6 15	6.7	758.90	29.882	33.4	29.3	.140	.....	77.2	N.	.....	.....	8	Ci-cu., Cu-a.
	8 15	7.	761.70	29.952	33.4	28.7	.139	.....	74.	NNE.	.....	.....	4	Ci-cu., Ci.
	10 15	7.	762.20	29.971	35.	29.	.118	.....	67.5	NNE.	.....	.....	3	Cl., Ci-cu., Cu-a.
	12 15	8.4	762.80	29.967	39.4	32.2	.119	.....	63.5	N.	.....	.....	6	Ci-cu., Cu-a.
	14 15	9.	762.10	29.957	41.8	34.2	.138	.....	63.	NW.	.....	.....	7	Ci-cu., Cu-a.
	16 15	9.	762.40	29.969	41.6	34.3	.133	.....	62.5	NW.	.....	.....	6	Ci-cu., Cu-a.
	18 15	10.	761.50	30.007	38.3	.....	.....	.....	65.	NW.	.....	.....	4	Cl., Ci-a.
	20 15	8.	765.00	30.076	34.	.....	.....	.....	69.4	NNE.	.....	.....	1	Cl., Ci-a.
	22 15	6.5	766.70	30.152	30.5	27.8	.145	63.	NNE.	1	Cl., Ci-a., halo.

March.] -

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

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Day.	Date.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.				Dir. points.	Force, lbs.			
5	0 15	5.7	767.95	30.304	27.9	24.9	.124	...	70.	N.	...	...	8	Cl., Ci-s.
	2 15	4.3	768.30	30.248	24.1	23.4	.139	...	67.	NE. by N.	...	...	6	Cl., Ci-s., S.
	4 15	2.9	769.75	30.289	22.	20.5	.117	...	68.	NNE.	...	...	5	N., Ci-s., Cl., Cu-s.
	6 15	2.1	771.05	30.343	21.	20.	.119	...	65.8	N.	...	...	6	Cl., Ci-s., S., Ci-cu.
	8 15	1.4	771.80	30.377	21.6	17.	.089	...	61.5	NNE.	...	...	7	Cl., Ci-s., Cu-s., S.
	10 15	1.7	772.30	30.394	22.8	18.1	.072	...	61.5	NNE.	...	...	8	Cl., Ci-cu., Ci-s.
	12 15	2.8	771.70	30.368	26.8	22.5	.098	...	58.3	NE.	...	...	8	Cl-s.
	14 15	3.	771.04	30.336	28.3	24.3	.100	...	59.	NNE.	...	...	5	Cl., Ci-cu.
	16 15	1.7	770.60	30.327	29.5	24.	.093	...	60.	ENE.	...	...	8	Cl., Ci-cu., N.
	18 15	2.8	770.40	30.314	28.	24.	.108	...	61.5	ENE.	...	...	8	Cl., Ci-cu., N.
	20 15	2.6	770.00	30.299	28.	24.2	.112	...	62.1	ENE.	...	...	8	Cl., Ci-cu., N.
	22 15	2.8	769.90	30.295	27.4	24.	.114	...	62.1	E. by S.	...	...	8	N. and ()
6	0 15	1.6	768.50	30.215	25.9	22.8	.112	...	63.4	ENE.	...	...	8	Cl-cu., Ci-s., N.
	2 15	1.3	767.65	30.213	26.1	22.5	.105	...	68.2	E.	...	...	8	N., Ci-s., Ci-cu.
	4 15	0.8	767.10	30.194	26.8	24.5	.129	...	71.9	ENE.	...	...	8	N.
	6 15	0.6	765.70	30.140	25.1	24.9	.152	9 A. M.	88.9	ENE.	...	...	8	N., snowing.
	8 15	0.2	764.30	30.187	24.8	24.6	.151	(D. 30.8)	91.3	ENE.	1	...	8	Snowing fast.
	10 15	0.4	762.00	29.995	27.3	27.	.164	(A. 24.6)	90.5	ENE.	3	...	8	Snowing.
	12 15	1.2	759.00	29.873	33.1	32.	.188	3 P. M.	91.3	ENE.	4	...	8	Rain and hail.
	14 15	1.7	754.20	29.683	33.6	33.5	.209	(D. 27.6)	89.5	ENE.	4	.20	8	Raining.
	16 15	2.	750.50	29.585	34.7	34.1	.208	(A. 34.)	90.	ENE.	7	.25	8	Raining.
	18 15	2.1	745.50	29.397	37.	36.6	.231	9 P. M.	90.	ENE.	7	.25	8	Raining.
	20 15	3.8	740.00	29.113	43.	43.	.293	(D. 43.)	88.	ENE.	5	.25	8	Raining.
	22 15	4.4	738.20	29.039	43.5	43.5	.399	(A. 44.3)	90.	ENE.	..	.68	8	Raining.

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

[MARCH.]

Day.	Hour.	Thermom. Fahr.			Barometer.		Force of vapor, ins.		Dew point, Fahr.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
		Temp.	Obsd height.	Corr. height.	Dry.	Wet.					Dir. points.	Force, lbs.			
8	4	6.6	748.35	29.428	35.6	34.5	.306	3 A. M.: (D. 31.9)	89.	WNW.	...	...	...	8	Cl-cu, N.
	0	6.2	748.85	29.451	34.5	33.8	.304	(A. 34.8)	91.8	SW.	...	...	...	8	Cl-cu, Cu, Cu-s, N.
	2	5.8	749.15	29.463	35.	34.1	.305	9 A. M.: (D. 31.)	89.3	SW. by W.	...	...	...	8	Cl-cu, Cu, N.
	4	5.6	749.45	29.476	35.	34.1	.305	(A. 37.)	88.8	W.	...	...	...	8	Cl-cu, S.
	6	5.6	749.80	29.588	37.6	34.1	.176	(D. 31.)	77.	WNW.	...	...	...	7	Cl-cu, Ci, Cu.
	8	5.8	753.30	29.631	36.6	33.6	.177	(A. 37.)	78.9	WNW.	...	...	...	8	Cl-cu, N.
	10	6.9	763.60	29.651	38.6	33.6	.157	3 P. M.: (D. 26.6)	71.5	WNW.	...	...	...	8	Cl-cu.
	12	6.6	764.00	29.670	38.6	33.6	.155	(A. 37.4)	70.	WNW.	...	...	...	8	Ca, Ci-cu.
	14	7.	764.50	29.723	36.6	32.	.163	9 P. M.: (D. 28.3)	71.4	WNW.	...	...	...	8	Ca, Ci-cu.
	16	6.3	765.80	29.789	35.	31.5	.175	(A. 35.)	80.3	W.	...	...	...	7	Ca, Ci-cu.
	18	5.8	767.40	29.853	33.6	30.5	.143	3 A. M.: (D. 23.1)	72.3	NW.	...	...	...	8	Ca, Cu-s.
	20	5.3	769.00	29.916	33.8	30.5	.137	(A. 34.)	71.	NW.	...	...	...	8	Cl-cu, Cu, Cu-s.
	22	4.8	761.30	29.948	35.	30.5	.136		70.7	NW. by W.	...	...	...	7	Ca, N, S, Cu-s, Ci-cu.
	0	4.5	761.90	29.975	33.7	29.3	.155		69.2	WNW.	...	...	...	5	Ca, Cu-s, Ci-cu.
9	2	4.	762.65	30.004	33.9	30.1	.153		69.	NW.	...	...	...	4	Cl, Cu.
	4	3.8	764.15	30.064	33.2	30.7	.145		67.	NW.	...	...	...	7	Cl, Ci-cu, Ci-s.
	6	3.5	766.40	30.149	34.3	31.	.145		66.6	NW.	...	...	...	1	Cl, Cu-s.
	8	4.3	766.50	30.152	35.6	31.	.145		65.	WNW.	...	...	...	8	Cl, Ci-cu, S.
	10	4.7	766.80	30.156	36.3	32.3	.143		66.8	NW.	...	...	...	4	Cl, Ci-cu, Ci-s, S.
	12	6.5	767.00	30.163	39.5	33.	.134		69.2	NW.	...	...	...	4	Clouds. (?)
	14	6.5	767.55	30.185	39.4	33.	.153		80.2	W. by S.	...	...	...	8	Ca, Ci-cu.
	16	7.3	768.00	30.201	36.5	32.	.161				...	...	...
	18	6.7	768.00	30.216	34.5	30.5					...	...	...
	20	6.3	768.35	30.216	34.5	30.5						
	22	5.5	767.35	30.181	30.8	29.						

March.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Day.	Date.	Barometer.			Therm'rs, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
10	h.													
	0	5.	766.40	30.146	31.	29.9	.174	3 A. M.: (D. 26.1)	84.	W. by S.	8	..	1	Cu., Cu-s., hazy.
	2	4.6	766.95	30.170	31.1	29.9	.173	(A. 31.4)	86.3	W. by S.	8	..	8	Ci cu., N.
	4	4.3	765.95	30.131	32.	30.	.166	9 A. M.: (D. 28.4)	85.8	ENE.	8	..	8	Ci-s., N. (?)
	6	4.	765.90	30.132	32.4	30.2	.165	9 A. M.: (D. 28.4)	83.	ENE.	8	..	8	Ci-s., N. (?)
	8	4.2	766.70	30.163	32.6	30.6	.170	(A. 32.5)	84.5	ENE.	8	..	8	N., snowing.
	10	4.	765.50	30.116	31.9	31.6	.193	3 P. M.: (D. 31.5)	91.5	E.	8	..	8	Snowing fast.
	12	4.6	764.10	30.057	33.	32.	.189	3 P. M.: (D. 31.5)	91.	ENE.	8	..	8	Snowing fast.
	14	4.7	762.30	29.886	33.5	32.	.201	(A. 33.2)	90.7	ENE.	8	..	8	Snowing fast.
	16	4.3	761.40	29.952	32.5	32.2	.198	9 P. M.: (D. 29.)	91.5	ENE.	8	..	8	Snowing fast.
	18	4.	760.70	29.928	31.9	31.9	.199	(A. 31.5)	91.9	ENE.	8	..	8	Snowing fast.
11	0	3.8	760.30	29.912	31.5	30.9	.186	(D. 29.)	89.8	ENE.	8	..	8	Snowing fast.
	2	3.6	759.40	29.877	31.2	30.6	.184	3 A. M.: (D. 27.8)	90.8	ENE.	8	..	8	Snowing fast.
	4	3.3	759.70	29.890	31.2	30.5	.181	(A. 30.3)	90.2	NE.	8	..	8	Snowing and raining.
	6	3.2	759.45	29.880	30.5	29.8	.177	9 A. M.: (D. 35.9)	88.5	N.	8	..	8	N., ceased rain and snow.
	8	2.9	760.60	29.929	30.4	29.5	.173	(A. 32.5)	87.2	NNW.	8	..	8	N.
	10	2.7	761.55	29.966	30.2	29.3	.172	3 P. M.: (D. 37.5)	86.3	NNW.	8	..	8	Ci-cu., Cu., S., N.
	12	3.2	763.00	30.019	32.2	30.5	.172	(A. 39.7)	82.3	NNW.	9	..	9	Ci-cu., Ci-s.
	14	5.	763.80	30.043	34.8	32.	.171	.....	78.5	NNW.	1	..	1	Cu., Ci.
	16	6.2	764.20	30.054	37.3	33.1	.159	.....	72.6	NNW.	1	..	1	Cu., Ci.
	18	6.8	764.15	30.048	39.3	33.3	.131	.....	66.	NW.	4	..	4	Clear.
12	0	7.	764.50	30.062	40.	33.2	.131	.....	62.5	NW.	4	..	4	Ci-cu. in S.
	2	7.2	765.90	30.116	36.	33.	.173	.....	67.8	NW.	4	..	4	Ci-cu. in S.
	4	6.4	766.75	30.154	33.2	30.4	.160	.....	73.	NNE.	4	..	4	Clear.
23	00	5.3	768.20	30.216	31.3	28.	.140	.....	69.	NNE.	..	..	..	Clear.

[1941.]

DAILY METEOROLOGICAL OBSERVATIONS.

MASON.]

Day.	Hour.	Barometer.			Therm in, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
13	4													
	0	15	4.6	767.95	30.209	29.6	25.6	.117	67.3	NE.			6	Cl-a, S.
	1	15	4.	768.05	30.217	27.5	24.5	.122	71.	NNE.			5	Cl-a, S.
	2	15	3.3	768.00	30.217	26.2	23.5	.120	72.6	NE.			4	Cl, Cl-a.
	4	15	3.3	768.30	30.232	25.7	23.9	.131	74.9	ENE.			6	Cl, Cl-a, Cl-a, Cu.
	6	15	2.7	768.60	30.246	25.6	26.1	.137	73.8	E.			8	Cl, Cl-a, Cl-a, Cu.
	8	15	2.6	768.30	30.246	28.5	26.1	.137	73.8	E.			8	Cl, Cl-a, Cl-a, Cu.
	10	15	2.4	767.50	30.202	31.2	28.3	.146	73.8	E.			8	Cl, Cl-a, Cl-a, Cu.
	12	15	3.	766.60	30.164	33.1	30.6	.165	74.	E.			8	Cu, Cl-a, Cl, N.
	14	15	3.2	763.30	30.031	33.1	31.9	.187	79.	E.			8	N, snowing.
	16	15	3.	761.30	29.955	31.6	30.6	.180	86.7	E.			8	N, rain and hail.
	18	15	2.8	758.50	29.846	31.7	31.	.185	90.8	E.			8	N, rain and hail.
	20	15	2.8	755.15	29.715	32.3	31.5	.188	89.2	E.			8	N, rain and hail.
13	22	15	2.7	750.00	29.512	32.6	32.	.193	90.	E.			8	Raining.
	0	15	2.4	745.70	29.344	34.7	34.6	.218	91.	E.			8	Raining.
	2	15	2.7	741.35	29.171	37.5	37.4	.240	91.2	ESE.			8	Raining.
	4	15	3.3	738.50	29.056	37.	36.6	.231	89.2	SW.			8	Raining.
	6	15	3.5	742.40	29.208	31.	30.	.176	86.1	W. by S.			8	Cl, Cu, Cl-a, N.
	8	15	3.7	744.50	29.291	32.3	31.8	.193	83.	WSW.			4	Cl, Cu, Cl-a.
	10	15	4.6	744.85	29.300	38.4	36.	.204	78.5	WSW.			7	Cu, Cl-a.
	12	15	5.3	745.30	29.315	41.2	36.	.173	66.	WSW.			8	Cu, Cl-a.
	14	15	6.3	745.00	29.297	42.3	36.3	.167	66.3	WSW.			8	Cu, Cl-a.
	16	15	6.2	745.70	29.337	41.3	36.7	.165	66.5	WSW.			8	Cu, Cl-a.
	18	15	6.4	746.80	29.368	40.5	35.	.161	66.8	WSW.			8	Cu, Cl-a.
	20	15	5.	748.20	29.425	38.	32.6	.144	67.	W. by N.			8	Cu, Cl-a.
	22	15	5.6	749.20	29.466	36.7	32.2	.162	74.	W. by N.			8	Cu, Cl-a.

Mass.

DAILY METEOROLOGICAL OBSERVATIONS.

1841.

[97]

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Date.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gausser's.	Wind.		Rain, inches.	Sky covered, eths.	Clouds, &c.
		Temperature, centigrade.	Old height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
15	0 15	1.9	760.85	29.943	25.9	23.7	.126	.....	70.2	NW.	..	..	2	Cu-s. (?)
	2 15	1.	762.50	30.011	23.5	20.5	.102	.....	70.	NW.	..	..	2	Cu., Ci-cu.
	4 15	0.	763.50	30.056	21.5	19.3	.104	.....	71.4	NW.	..	..	1	S., Cu s. (?)
	6 15	-0.9	764.85	30.114	20.5	19.	.110	.....	71.8	NW. by N.	..	..	..	Clear.
	8 15	-0.7	765.75	30.148	22.2	19.4	.098	.....	70.5	NW.	..	..	1	Clear.
	10 15	0.	767.00	30.194	24.4	20.7	.095	.....	68.3	NW.	..	..	1	Ci.
	12 15	2.	768.30	30.157	28.	23.5	.101	.....	67.5	NW.	..	..	1	Ci.
	14 15	3.	765.50	30.120	31.2	27.4	.130	.....	66.	N.	..	..	7	Light Ci.
	16 15	3.2	765.10	30.102	32.2	27.7	.125	.....	68.1	SW.	..	..	8	Ci., Ci-s.
	18 15	3.4	764.70	30.087	30.1	26.	.119	.....	69.9	SE by E.	..	..	8	Ci., Ci-s.
	20 15	3	765.00	30.100	30.5	27.9	.146	.....	73.9	SSE.	..	..	8	Ci., Ci-s.
	22 15	2.8	764.65	30.088	30.3	27.9	.148	.....	88.3	SE by E.	..	..	8	Ci., Ci-s.
	0 15	2.3	763.85	30.059	27.5	27.4	.168	3 A. M.: (D. 27.3)	89.8	ENE.	..	..	8	N., snowing.
	2 15	2.	762.45	30.005	27.6	27.5	.169	(A. 27.6)	90.3	E.	..	..	8	N., snowing.
	4 15	1.8	761.10	29.953	28.3	28.1	.171	9 A. M.: (D. 26.)	90.2	ENE.	..	..	8	Snowing very fast.
16	6 15	1.6	760.50	29.930	29.3	29.3	.181	(A. 27.8)	89.2	ENE.	..	..	8	Snowing very fast.
	8 15	1.3	760.50	29.932	29.5	29.1	.176	(D. 26.)	88.	ENE.	..	..	8	Snowing lightly.
	10 15	1.8	760.80	29.943	26.6	26.1	.156	(A. 27.8)	86.	ENE.	..	..	8	Snowing fast.
	12 15	2.	761.30	29.960	24.6	24.	.143	3 P. M.: (D. 30.)	83.	ENE.	..	..	8	Snowing fast.
	14 15	1.5	762.50	30.010	23.2	21.7	.133	(D. 30.)	87.	NNE.	..	..	8	Snowing.
	16 15	1.3	763.50	30.049	23.2	23.	.142	(A. 32.2)	83.1	NNE.	..	..	8	Snowing.
	18 15	1.4	765.05	30.110	23.9	22.9	.184	.....	81.9	NNE.	..	..	8	Snowing.
	20 15	-0.3	767.10	30.199	23.	22.	.139	.....	80.	NNE.	..	..	8	Ceased snowing.
	22 15	-0.7	767.30	30.209	23.6	21.	.118	.....	80.	NNE.	..	..	8	Ceased snowing.
	23 15	0.7	767.30	30.209	23.6	21.	.118	.....	80.	NNE.	..	..	8	Ceased snowing.

Day.	Date.	Barometer.			Therm'ms, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Sausures's	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Obs'd height, millimetres.	Corr. height, inches.	Temperature, centigrade.	Dry.	Wet.				Dir. points.	Force, lbs.			
17	4. m.													
	0 15	766.05	30.241	-1.2	21.5	20.1	.116	...	81.2	NNE.	1	..	8	N.
	2 15	767.95	30.340	-1.7	21.5	20.	.114	...	78.3	NNE.	2	..	8	Showing.
	4 15	767.35	30.314	-2.1	20.5	19.4	.115	...	78.2	NNE.	2	..	8	Showing.
	6 15	767.95	30.243	-2.6	20.	18.3	.119	...	81.9	NNE.	1	..	8	Showing.
	8 15	769.00	30.383	-2.	23.1	20.3	.101	...	70.	NNE.	1	..	8	Cl-cu, N.
	10 15	768.75	30.369	-1.	22.4	22.2	.108	...	69.	NNE.	4	..	8	Cl, Ci-cu, Ci-4.
	12 15	768.65	30.359	0.	25.3	23.1	.108	...	68.5	NNE.	4	..	8	Cl, Ci-cu, N.
	14 15	768.00	30.234	0.	26.4	21.5	.097	...	66.	NNE.	3	..	8	Cl-cu, N.
	16 15	767.40	30.210	0.	26.5	21.8	.090	...	61.5	NNE.	2	..	8	Cl-cu, N.
18	0 15	767.35	30.205	-0.2	26.5	24.5	.132	...	60.	NNE.	1	..	8	Cl-cu, N.
	2 15	768.75	30.186	-0.3	27.	23.	.103	...	58.9	NNE.	1	..	8	Cl-cu, N.
	4 15	768.30	30.168	-0.2	27.1	21.9	.086	...	57.	NNE.	1	..	8	N. (?)
	6 15	764.85	30.112	-0.6	26.5	21.	.078	...	55.	NNE.	..	..	8	N.
	8 15	762.95	30.040	-1.	26.1	20.5	.075	...	55.5	NNE.	..	..	8	N.
	10 15	761.55	29.985	-1.1	27.	21.5	.081	...	56.4	NNE.	..	..	8	N.
	12 15	760.70	29.952	-1.3	28.	23.5	.086	...	57.1	NNE.	1	..	8	N, Ci-4.
	14 15	759.80	29.913	-0.5	31.9	27.2	.130	...	65.3	NNE.	2	..	8	N, raining.
	16 15	760.65	29.945	0.	32.2	30.7	.175	...	76.	NW by N.	1	..	8	N, raining.
	18 15	759.50	29.895	0.8	33.6	32.	.183	...	77.3	NNW.	..	..	8	N, raining.
19	0 15	768.40	29.849	1.5	36.7	31.6	.144	...	73.	N.	..	.36	8	N, raining.
	2 15	768.50	29.850	2.	38.1	33.7	.162	...	73.5	NNE.	..	.69	8	N, raining.
	4 15	768.95	29.866	2.6	38.6	33.6	.177	...	76.2	N.	..	.15	8	N, raining.
	6 15	759.50	29.885	2.9	42.	38.	.200	...	68.1	N.	..	.01	3	N.
	8 15	759.30	29.872	4.	41.6	34.5	.137	...	63.8	NW by N.	..	..	3	N.

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

MARCONI.]

Day.	Hour.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Beaumore's.	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
			Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
23	0	15	10.	768.45	30.202	37.5	34.	.174	3 A. M.: (D. 28.9)	76.2	NE by E.	..	..	3	Cu-s, (?) Ci-cu., Ci a.
	2	15	9.1	768.95	30.226	34.8	32.	.171	(A. 33.5)	81.	ENE.	..	..	5	Cu s, (?) Cu., Ci-cu.
	4	15	8.	769.15	30.238	33.	30.5	.164	9 A. M.: (D. 26.3)	83.6	ENE.	..	..	5	N., (?) Cu., Ci-cu.
	6	15	7.2	769.70	30.265	32.5	29.9	.159	(A. 38.)	83.3	E. by N.	..	..	7	Ci., S, Ci a.
	8	15	7.	770.10	30.282	35.8	32.2	.160	3 P. M.: (D. 29.1)	81.	ENE.	..	..	1	Ci., Ci-s, Ci-cu., S.
	10	15	8.	769.90	30.268	41.6	36.9	.183	(A. 47.7)	78.2	E.	..	..	3	Ci., Ci s, Ci-cu., S.
	12	15	9.5	769.00	30.226	49.	41.7	.198	(A. 47.7)	72.	ESE.	1	..	4	Light Ci. and S.
	14	15	10.2	767.60	30.168	49.5	42.1	.200	(D. 28.8)	71.	SE.	1	..	7	Ci., S.
	16	15	10.2	767.00	30.144	44.5	39.1	.194	9 P. M.: (D. 32.3)	75.4	SE.	1	..	8	Ci., S.
	18	15	10.	766.75	30.136	39.8	36.6	.199	(A. 38.2)	81.	SE.	..	..	8	Ci., S.
	20	15	9.3	766.10	30.113	38.	36.	.207	3 A. M.: (D. 43.7)	89.	ENE.	..	..	8	Cu., Ci-cu.
	22	15	8.5	764.35	30.048	39.	37.1	.217	(A. 40.2)	91.3	E.	..	..	8	Very dark.
23	0	15	8.3	762.80	29.988	40.6	39.	.237	9 A. M.: (D. 43.7)	90.2	ENE.	..	..	8	Cu., Ci-cu., N.
	2	15	8.2	760.65	29.904	42.	41.	.283	(A. 48.7)	91.4	E.	..	..	8	Cu., Ci-cu., N.
	4	15	8.3	758.90	29.835	46.3	44.6	.291	9 A. M.: (D. 46.3)	89.	E. by S.	..	..	8	Cu., Ci-cu., N.
	6	15	8.6	757.45	29.777	51.9	49.6	.342	(A. 57.)	88.5	S. by E.	1	..	8	N., Cu.
	8	15	10.2	755.75	29.702	56.7	53.	.373	3 P. M.: (D. 50.5)	84.	S.	6	..	8	Cu., Ci-cu., S.
	10	15	11.3	755.00	29.668	57.2	53.	.387	(A. 56.5)	85.2	S.	3	..	8	Cu., Ci-cu., S. and N.
	12	15	12.5	752.80	29.577	60.6	56.6	.423	9 P. M.: (D. 29.)	83.5	S.	3	..	8	Ci-cu., N.
	14	15	13.3	751.70	29.538	57.	55.5	.434	(A. 39.6)	87.	NW.	2	..	8	N., raining.
	16	15	13.6	752.80	29.571	50.2	48.	.394	(A. 39.6)	87.	WNW.	..	..	8	N., raining.
	18	15	12.7	754.75	29.652	49.8	40.5	.232	(D. 29.)	79.2	WNW.	..	..	2	Cu., Ci-cu.
	20	15	11.9	756.75	29.733	40.5	37.5	.208	(A. 39.6)	80.	WNW.	..	..	..	Clear.
	22	15	10.9	757.45	29.767	38.	35.5	.198		81.2	WNW.	..	..	..	Clear.

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

Manag.]

Day.	Date.	Barometer.			Therm'ms, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges's.	Wind.		Rain, inches.	Sky covered, Sths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
26	h. m.	13.6	764.60	30.034	43.3	40.	.236	3 A. M.: (D. 34.2)	82.7	S. by W.	..	..	..	Clear.
		15	763.90	30.013	41.	38.5	.223	(D. 34.2)	85.9	S. by W.	..	..	..	Clear.
		12.3	763.85	30.016	38.6	36.7	.213	(A. 40.4)	89.5	SSW.	..	..	..	Clear, (slight haze.)
		11.2	764.00	30.025	38.7	37.5	.228	9 A. M.: (D. 40.)	90.7	SSW.	..	..	..	Ci., Ci-a.
		10.6	764.20	30.030	47.7	44.7	.277	(D. 40.)	84.3	SSW.	..	..	..	Hazy.
		11.	764.00	30.014	58.	51.	.308	(A. 54.)	71.2	SSW.	..	..	..	Ci., S.
		12.7	763.20	29.971	63.8	65.	.343	3 P. M.: (D. 48.)	68.1	SSW.	..	..	..	Ci., S.
		15.	762.15	29.925	68.8	57.8	.363	(A. 53.4)	75.	S.	..	..	..	S.
		16.2	761.80	29.901	68.6	57.	.343	(D. 45.)	82.8	S. by W.	..	..	..	Ci-a.
		18.	762.30	29.924	55.4	50.5	.325	9 P. M.: (D. 46.4)	90.8	S.	..	..	..	A little Ci.
		17.5	762.10	29.920	52.3	50.	.347	(A. 53.4)	89.7	SSW.	..	..	..	Clear.
		16.6	761.55	29.904	51.	49.1	.341	3 A. M.: (D. 46.4)	92.	SSW.	..	..	..	Very dark, (N.)
27	h. m.	15.7	762.70	29.952	52.5	50.1	.348	(D. 46.4)	93.9	S.	..	..	..	Very dark, (N.)
		15.1	761.15	29.893	48.5	47.5	.332	(A. 50.5)	91.7	S. by E.	..	..	..	Very dark, (N.)
		14.6	761.10	29.894	47.5	47.	.331	9 A. M.: (D. 46.7)	89.	SSW.	..	..	..	Ci., Ci-a., S.
		14.2	761.15	29.893	53.6	51.6	.372	(D. 46.7)	80.	SSW.	..	..	..	Light Ci. and S., (hazy.)
		15.1	761.20	29.890	62.	57.	.417	(A. 57.2)	75.	SW.	..	..	..	Light Ci. and S., (hazy.)
		15.6	760.40	29.850	65.3	59.1	.439	3 P. M.: (D. 54.8)	71.	SW.	..	..	..	Light Ci. and S., (hazy.)
		17.4	759.55	29.809	70.5	61.4	.446	(D. 54.8)	73.	SSW.	..	..	..	Light Ci. and S., (hazy.)
		18.8	758.70	29.778	70.6	62.4	.475	(A. 71.6)	77.8	SSW.	..	..	..	Ci., Ci-a., S.
		19.9	758.90	29.779	65.	59.	.439	9 P. M.: (D. 52.)	88.	SSW.	..	..	..	Ci., Ci-a., S.
		19.	756.75	29.778	59.	55.	.397	(D. 52.)	81.	SSW.	..	..	..	Ci., Ci-a., S.
		18.9	756.55	29.770	56.5	54.	.400	(A. 59.)	88.	SSW.	..	..	..	Hazy.
		16.9	756.55	29.770	56.5	54.	.400	(A. 59.)	88.	SSW.	Hazy.

MARCH.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, eths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
29	0 15	15.2	760.75	29.875	48.8	44.6	.263	3 A. M.:	81.5	ENE.	..	..	8	N., raining.
	2 15	14.5	760.25	29.859	47.1	43.4	.257	(D. 38.1)	82.2	E. by N.	..	..	8	N., raining.
	4 15	13.5	760.40	29.869	44.6	42.	.254	(A. 48.6)	86.	E. by S.	..	.01	8	N., raining.
	6 15	12.5	759.35	29.833	42.5	40.5	.247	9 A. M.:	88.9	E.	..	.04	8	N., raining.
	8 15	11.3	759.00	29.824	40.4	39.6	.252	(D. 38.)	92.5	E. by N.	..	.08	8	N., raining.
	10 15	10.9	757.75	29.779	41.	40.4	.261	(A. 40.6)	92.5	E.	..	.03	8	N., raining.
	12 15	10.2	754.80	29.666	40.5	40.1	.261	3 P. M.:	93.	E. by N.	..	.03	8	N., raining.
	14 15	9.4	751.60	29.543	41.1	40.6	.264	(D. 39.)	92.4	E. by N.	..	.04	8	N., raining.
	16 15	9.5	750.80	29.512	41.4	41.1	.272	(A. 41.3)	92.3	NE. by E.	..	.02	8	N., raining.
	18 15	9.5	751.00	29.519	40.3	39.9	.259	9 P. M.:	93.	N.	..	..	8	N., Cu., Ci-cu.
	20 15	9.3	752.00	29.559	40.5	39.9	.255	(D. 37.)	91.6	NE. by N.	..	..	8	N.
	22 00	9.	752.60	29.585	39.7	39.	.247	(A. 40.5)	91.5	N.	..	..	8	N.
	23 00	8.7	752.60	29.587	39.	38.7	.250	3 A. M.:	93.1	NNW.	..	..	8	N.
	2 15	8.3	752.70	29.592	39.	38.5	.245	(D. 37.8)	92.2	WNW.	..	..	8	N.
	4 15	8.1	753.10	29.609	39.2	38.8	.249	(A. 39.4)	92.1	SW.	..	..	8	N.
	6 15	7.9	754.70	29.674	40.	39.3	.250	9 A. M.:	91.	WSW.	..	..	8	N., Cu., Ci-cu.
30	8 15	8.1	756.25	29.732	41.2	38.2	.214	(D. 33.2)	81.5	N.	..	..	8	N., Cu., Ci-cu.
	10 15	8.7	757.60	29.783	42.8	39.	.212	(A. 41.8)	77.5	NNE.	..	..	8	Cu., Ci-cu.
	12 15	8.5	758.50	29.818	39.6	36.8	.205	3 P. M.:	81.8	ENE.	..	..	8	Cu., Ci-cu.
	14 15	8.7	759.70	29.865	40.	36.2	.188	(D. 32.2)	77.4	N.	..	..	8	Cu., Ci-cu.
	16 15	8.7	760.85	29.911	42.2	36.8	.176	(A. 42.2)	72.	N.	..	..	8	Cu., Ci-cu.
	18 15	8.6	762.70	29.933	39.	36.	.196	.....	80.	N.	..	..	8	Cu., Ci-cu.
	20 15	8.2	764.95	30.073	37.6	33.9	.171	.....	76.	ENE.	..	..	8	Cu., Ci-cu.
	22 15	7.1	766.45	30.138	34.5	30.5	.148	.....	74.	ENE.	..	..	8	Cu., Ci-cu.

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
31	0 15	6.5	767.45	30.181	29.7	27.5	.148	.....	76.1	ENE.	..	..	3	Cl., Ci.s.
	1 15	5.3	767.70	30.196	26.6	25.1	.141	.....	73.2	NE.	..	..	..	Clear.
	2 15	4.4	768.15	30.218	24.5	22.5	.122	.....	74.6	NE.	..	..	..	Clear.
	4 15	3.7	768.80	30.248	24.	22.2	.122	9 A. M.: ..	77.2	NE.	..	..	6	Cu., Ci., Ci.s., S.
	6 15	4.5	770.00	30.290	31.5	28.5	.146	(D. 24.5)	72.	NE.	..	..	2	Cl., Ci-cu., Ci.s.
	8 15	6.2	769.50	30.262	38.4	34.4	.171	(A. 34.6)	74.5	SSE.	..	..	5	Light Cl., Cu., and Ci.s.
	10 15	7.6	768.00	30.198	41.5	35.8	.163	4 1/2 P. M.: ..	69.	SSW.	..	..	2	Cu.
	12 15	9.	766.75	30.141	45.7	39.1	.181	(D. 30.)	66.2	SW.	..	..	2	Cl., Cu.
	14 15	10.	765.80	30.098	45.7	39.2	.183	(A. 45.7)	66.5	SSW.	..	..	3	Ci-cu., Cu.
	16 15	9.1	764.90	30.067	41.7	37.	.184	9 P. M.: ..	73.8	ESE.	..	..	8	Ci-cu., Cu.
	18 15	8.	765.30	30.088	37.	34.	.180	(D. 30.)	80.	S. by E.	..	..	8	Ci-cu., Cu.
	20 15	7.3	764.25	30.061	37.	34.5	.190	(A. 36.5)	82.	S.	..	..	8	Ci-cu., Cu.
	22 15													

1841.

DAILY METEOROLOGICAL OBSERVATIONS.

April.]

Day.	Hour.	Barometer.			Thermite, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, eths.	Clouds, &c.
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
1	a. m.													
	0 15	6.8	763.15	30.008	38.	35.8	.203	3 A. M.:	84.3	SSE.	...	...	8	Cu., Ci-cu., N.
	2 15	6.7	761.70	29.953	39.	38.	.235	(D. 36.5)	90.2	S.	...	...	8	N., raining.
	4 15	6.7	760.35	29.900	40.1	39.4	.251	(A. 39.2)	91.	S. by W.	...	.01	8	N., raining.
	6 15	6.8	759.70	29.873	41.4	40.4	.257	9 A. M.:	90.3	S. by W.	...	.01	8	N., Ci-cu., Ci-a., raining.
	8 15	7.4	758.80	29.836	43.8	42.6	.275	(D. 38.5)	89.5	SSW.	...	.01	8	N., Ci-a., raining.
	10 15	8.	758.00	29.825	46.5	44.5	.287	(A. 45.)	87.2	SW.	...	...	8	Ci-cu., Ci-a., N.
	12 15	9.	758.25	29.806	50.5	47.	.298	3 P. M.:	81.	WSW.	...	...	7	Ci., Ci-a.
	14 15	10.9	758.15	28.794	56.	49.6	.296	(D. 40.7)	72.	WSW.	...	...	2	Cu., Ci-cu.
	16 15	12.3	758.30	29.793	58.5	49.5	.266	(A. 58.)	66.5	W.	...	...	1	Cu.
	18 15	13.4	759.06	29.816	52.4	48.4	.309	9 P. M.:	80.2	SSW.	...	...	...	Clear.
	20 15	12.8	760.25	29.867	48.5	45.4	.284	(D. 44.)	84.5	SSW.	...	...	...	Clear.
	22 15	12.1	760.35	29.874	45.	43.9	.291	(A. 46.4)	88.2	SSW.	...	...	...	Clear.
	0 15	11.7	759.85	29.856	45.5	43.5	.277	3 A. M.:	87.3	SSW.	...	...	7	Cu., Ci-cu.
	2 15	11.2	759.50	29.845	48.6	42.5	.276	(D. 40.9)	91.2	SSW.	...	.04	8	N., Cu., rain.
	4 15	10.7	759.00	29.827	42.9	41.5	.263	(A. 44.)	90.8	SE. by S.	...	...	2	Ci-cu., (?) hazy.
2	6 15	10.3	758.90	29.826	40.8	40.	.255	9 A. M.:	91.9	NE. by E.	...	...	2	Ci., Ci-cu.
	8 15	11.2	758.40	29.809	58.5	50.2	.389	(D. 43.5)	88.5	SE.	...	...	1	Ci., Ci-cu., very hazy.
	10 15	13.	757.50	29.762	61.3	56.	.399	(A. 56.8)	79.	S.	...	...	4	Ci., Cu., Ci-cu.
	12 15	15.	756.70	29.677	64.5	59.3	.425	3 P. M.:	78.	SSW.	...	...	6	Ci., Cu., Ci-cu.
	14 15	17.	753.40	29.579	67.1	60.1	.447	(D. 52.6)	76.3	S.	...	...	7	Ci., Ci-cu., Ci-a.
	16 15	17.	750.90	29.491	66.5	59.5	.438	(A. 87.1)	76.	S.	...	...	7	Ci., Ci-a.
	18 15	17.3	752.60	29.546	50.	49.3	.357	.....	91.	WNW.	...	.16	8	N., raining.
	20 15	15.4	754.50	29.631	48.2	45.	.278	.....	81.2	WNW.	...	...	8	Ci-cu., N.
	22 15	13.2	756.00	29.697	43.	38.6	.203	.....	72.	NW.	...	...	...	Clear.

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

APRIL.]

Day.	Hour.	Date.	Barometer.		Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Gaussure's.	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
			Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
3	h. m.													
	0 15		758.50	29.803	41.	35.2	.158	3 A. M.:	69.	NW.				Clear.
	2 15		759.90	29.868	38.5	32.3	.131	(D. 24.)	68.	NW.				Clear.
	4 15		760.90	29.914	36.9	31.	.133	(A. 37.7)	68.	NW.				Clear.
	6 15		762.85	29.999	35.9	32.	.160	9 A. M.:	70.1	W.				Clear.
	8 15		764.30	30.047	39.3	32.3	.123	(D. 19.8)	64.2	NW. by W.				Clear.
	10 15		765.00	30.073	41.9	33.8	.120	(A. 41.)	59.8	NW.				Clear.
	12 15		765.25	30.076	45.2	37.	.145	3 P. M.:	58.	NW.				Clear.
	14 15		765.00	30.065	48.7	39.1	.147	(D. 26.3)	55.7	WNW.				Clear.
	16 15		765.00	30.061	50.	40.8	.168	(A. 49.)	55.2	W. by S.				Ci. Ci-a.
	18 15		765.36	30.072	47.6	39.9	.176	9 P. M.:	58.	W. by S.				Ci. Ci-a.
	20 15		766.50	30.123	39.7	36.4	.195	(D. 26.3)	72.	W. by S.				Ci-a.
	22 15		768.70	30.136	37.6	35.6	.203	(A. 39.)	81.5	SSW.				Ci, Ci-a.
	0 15		761.25	29.524	50.5	50.1	.371	3 A. M.:	90.	SW. by W.				N.
	2 15		761.30	29.526	48.5	48.	.343	(D. 47.2)	89.4	SW.				N. Ci-cu.
	4 15		752.15	29.559	50.	46.6	.294	(A. 48.5)	81.7	WNW.				N., Cu., Ci-cu.
	6 15		764.20	29.640	46.3	41.4	.224	9 A. M.:	73.8	WNW.				N., Ci., Ci-a., S.
5	8 15		755.75	29.699	47.	41.	.207	(D. 33.2)	70.	WNW.				Cu., Ci., Ci-a.
	10 15		757.50	29.765	50.	43.	.215	(A. 48.6)	68.	WNW.				Cu., Ci., Ci-cu., Ci-a.
	12 15		757.80	29.770	53.	44.8	.220	3 P. M.:	66.	WNW.				Ci-cu.
	14 15		757.70	29.766	56.3	47.3	.239	(D. 42.2)	62.5	WNW.				Cu., Ci., Ci-cu., Ci-a.
	16 15		758.15	29.772	56.	46.8	.231	(A. 56.7)	62.3	W. by S.				Ci-cu., N.
	18 15		759.00	29.806	53.5	46.5	.233	9 P. M.:	65.	W. by N.				Ci-cu., N.
	20 15		760.65	29.877	48.	45.4	.238	(D. 42.5)	85.	W.				Ci-cu., N., raining slightly.
	22 15		761.20	29.904	43.2	42.2	.274	(A. 46.5)	93.	W.		.02		Ci-cu.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Date.	Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Sausure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
			Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6	9	a. m.													
		0 15	12.	761.30	29.912	43.1	42.3	.277	3 A. M.: (D. 39.2)	91.8	WSW.	..	..	1	Ci-s, hazy.
		2 15	11.3	760.75	29.894	42.	42.	.273	(A. 42.1)	91.3	WNW.	..	..	8	N.
		4 15	10.8	761.25	29.916	42.5	41.5	.268		91.	WNW.	..	..	8	N.
		6 15	10.4	762.35	29.960	43.	42.	.272	9 A. M.: (D. 39.)	91.3	W. by N.	..	..	8	N.
		8 15	10.	764.00	30.027	44.5	41.	.235	(A. 46.)	80.	NW.	..	..	8	N., Ci, Ci-cu.
		10 15	10.6	764.90	30.061	47.5	42.2	.225		75.	WNW.	..	..	6	Cu, Ci-cu, Cu-s.
		12 15	11.9	764.60	30.041	51.1	42.6	.193	3 P. M.: (D. 32.2)	64.	WNW.	..	..	5	Cu, Ci-cu.
		14 15	12.5	764.70	30.044	54.	44.4	.200	(A. 53.7)	59.	WNW.	..	..	5	Cu, Ci-cu.
		16 15	13.	765.20	30.060	52.5	43.	.186		...	WNW.	..	..	3	Cu, Ci-cu.
		18 15	13.2	765.95	30.088	49.1	43.	.224	9 P. M.: (D. 32.)	58.8	WNW.	..	..	..	Ci-s in Hor.
		20 15	12.	766.85	30.131	43.5	39.	.204		70.3	S.	..	..	..	Ci s. in Hor.
		22 15	11.3	766.80	30.132	40.3	37.5	.210	(A. 41.9)	80.3	S.	..	..	..	Ci-s in Hor.
		0 15	10.4	766.15	30.110	40.5	36.9	.198	3 A. M.: (D. 35.)	87.	S.	..	..	8	Cu, Ci-cu, Ci-s.
		2 15	9.8	765.60	30.092	41.5	39.3	.233		86.	W. by N.	..	..	8	Cu, Ci-cu, N.
		4 15	9.3	765.70	30.097	41.5	39.1	.229	(A. 40.1)	86.	SW.	..	..	8	Cu, Ci-cu, Ci-s.
7	7	6 15	9.2	765.70	30.098	42.	39.4	.229	9 A. M.: (D. 31.6)	84.2	SE.	..	..	8	Cu, Ci-cu, S.
		8 15	9.9	765.25	30.076	46.	41.7	.232		79.5	ENE.	..	..	8	Ci-cu, Cu-s.
		10 15	10.	764.25	30.037	46.8	42.5	.239	(A. 44.2)	79.	ENE.	..	..	8	N., Ci-cu, Cu-s.
		12 15	10.7	763.00	29.947	53.5	47.7	.280	3 P. M.: (D. 39.)	76.5	SE.	..	..	8	N., Ci-cu, Cu-s.
		14 15	11.3	763.70	29.852	53.6	46.5	.251		72.6	SE.	..	..	8	N., Ci-cu, Cu-s.
		16 15	12.	757.60	29.767	56.5	50.	.300	(A. 55.6)	73.	SSE.	..	..	8	N., Ci-cu, Cu-s.
		18 15	12.8	757.15	29.745	53.4	48.4	.298	9 P. M.: (D. 42.5)	77.8	NE.	..	..	8	N., Ci-cu, Cu-s.
		20 15	12.5	756.85	29.735	47.5	45.	.286		85.5	NNE.	..	..	4	N., Ci-cu, Cu-s.
		22 15	11.6	756.50	29.725	43.	41.6	.264	(A. 45.5)	90.8	NE.	..	..	7	N., Ci-cu, Cu-s.

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

April.]

Day.	Hour.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, Sths.	Clouds, &c.
			Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
8	h. m.														
	0 15		10.7	756.40	29.726	42.3	41.	.259	3 A. M.: (D. 40.)	91.5	NE. by N.	..	..	8	N.
	2 15		10.2	755.35	29.687	41.7	40.7	.260	(A. 41.5)	92.2	N. by W.	..	..	8	N.
	4 15		9.9	753.85	29.629	41.	40.5	.263	9 A. M.: (D. 38.6)	91.8	N. by E.	..	.01	8	N., raining lightly.
	6 15		9.5	755.45	29.695	41.5	40.5	.258	(A. 42.9)	91.5	N.	..	..	8	N., Cu., Cu-s.
	8 15		9.5	756.90	29.751	42.7	41.2	.259	(A. 42.9)	89.	NNW.	..	..	8	N., Cu., Cu-s.
	10 15		9.7	757.70	29.782	46.2	43.	.259	3 P. M.: (D. 39.4)	82.	NNW.	..	..	8	Cu., Ci-cu.
	12 15		10.8	758.00	29.788	50.	45.	.258	(A. 53.4)	76.3	NNW.	..	..	8	Cu., Ci-cu., N.
	14 15		12.	757.60	29.787	53.5	46.5	.253	(D. 39.4)	71.6	NW.	..	..	6	Cu., Ci-cu.
	16 15		13.	758.20	29.785	54.	45.6	.227	..	67.	NW.	..	..	1	Cu., Ci-cu.
	18 15		13.3	758.55	29.797	52.8	47.	.272	..	57.5	W. by N.	..	..	..	Cu., Ci-cu.
	20 15		12.7	759.45	29.835	46.5	43.	.264	..	77.1	S. by E.	..	..	..	Clear.
9	22 15		11.6	759.30	29.834	41.	40.	.253	..	91.	SSE.	..	..	..	Clear.
	0 15		10.5	759.50	29.848	40.	39.5	.254	3 A. M.: (D. 37.8)	92.7	SSW.	..	..	4	Cl., Ci-s.
	2 15		9.8	759.25	29.842	39.1	39.	.254	(A. 39.8)	93.	S. by W.	..	..	8	Cl., N., Cu.
	4 15		9.3	759.15	29.839	41.	41.	.274	9 A. M.: (D. 42.8)	92.3	S. by W.	..	..	8	Cl., N., Cu.
	6 15		9.	759.10	29.839	43.1	42.8	.268	(A. 52.7)	91.6	SW. by S.	..	..	8	N., () Cu., Ci-cu.
	8 15		10.	757.75	29.782	48.	46.3	.310	(D. 42.8)	87.	SSW.	..	..	7	Ci-cu., Cu-s.
	10 15		11.3	756.90	29.742	56.3	51.3	.334	(A. 52.7)	78.	SSW.	..	..	7	Ci-cu., Cu-s.
	12 15		13.	753.90	29.617	60.2	52.5	.322	3 P. M.: (D. 49.)	70.5	SSW.	..	..	2	Cl., S.
	14 15		14.9	751.80	29.525	64.2	55.5	.354	(D. 49.)	70.	SSW.	..	..	3	Cl., Ci-s, Ci-cu.
	16 15		17.1	751.00	29.483	65.6	58.1	.408	(A. 65.2)	75.5	SSW.	..	..	4	Cl., Ci-s, Ci-cu.
	18 15		17.	751.00	29.484	61.3	57.2	.431	9 P. M.: (D. 54.)	82.1	SW.	..	..	8	Cl., Ci-s, Ci-cu.
	20 15		16.8	751.35	29.499	58.2	56.	.434	..	89.	SW.	..	..	..	Light Ci-cu.
	22 15		16.6	752.75	29.555	59.6	57.	.446	(A. 58.)	86.1	NNW.	6	N., Cu., Cu-s.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1941.]

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Day.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Sausure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
10	A. m.													
	0 15	16.2	753.55	29.588	56.	51.5	.343	3 A. M.: (D. 40.1)	81.2	NNE.	..	..	8	N., () Cu., Ci-cu., Ci.
	2 15	15.3	753.95	29.609	49.5	44.9	.273	(A. 47.7)	82.9	NNE.	..	..	8	N., () Ci., Ci-s.
	4 15	14.	754.80	29.648	43.7	39.2	.207	9 A. M.: (D. 29.)	79.2	NNE.	..	..	6	Cu., Ci-cu.
	6 15	12.7	756.45	29.718	42.1	36.8	.177	(A. 43.6)	75.2	NE. by N.	..	..	8	Ci., Ci-cu., S.
	8 15	12.	757.00	29.743	43.5	38.7	.199	(D. 29.)	76.2	NE.	..	..	8	Ci-cu., Cu-s., Cu.
	10 15	11.3	757.65	29.773	42.6	36.6	.168	(A. 43.6)	71.8	ENE.	..	..	8	Ci-cu., Cu-s., Cu.
	12 15	11.	757.60	29.772	42.3	36.3	.166	4 P. M.: (D. 30.5)	71.5	ENE.	..	..	8	Ci-cu., Cu-s., Cu.
	14 15	10.3	757.60	29.775	40.	35.6	.177	(A. 33.1)	75.5	ENE.	..	..	8	N.
	16 15	8.9	756.70	29.746	33.3	33.3	.209	.....	91.	ENE.	..	..	8	N., snowing.
	18 15	8.	758.20	29.809	32.5	32.5	.203	.....	92.	ENE.	..	..	8	N., snowing.
	20 15	7.7	759.75	29.871	30.8	30.5	.187	.....	89.	ENE.	..	..	8	N., snowing.
12	22 15	6.6	760.75	29.916	30.	28.4	.159	.....	84.	ENE.	..	..	8	N., stopped snowing.
	0 15	5.7	767.00	30.166	34.5	33.3	.195	3 A. M.: (D. 25.9)	77.3	ESE.	..	..	8	N.
	2 15	5.2	766.00	30.129	34.3	31.5	.168	(A. 34.4)	79.1	E.	..	..	8	N.
	4 15	4.8	765.65	30.118	34.6	31.5	.165	.....	77.	E.	..	..	8	N.
	6 15	4.5	766.00	30.133	32.	30.1	.167	.....	82.	ENE.	..	..	8	N., snowing fast.
	8 15	4.	764.40	30.073	30.	29.7	.181	.....	90.5	ENE.	..	..	8	N., snowing fast.
	10 15	4.4	764.00	30.054	32.2	32.	.197	.....	92.	NE. by E.	..	..	8	N., snowing fast.
	12 15	4.9	762.25	29.982	32.8	32.4	.198	3 P. M.: (D. 31.)	92.5	ENE.	..	..	8	N., snowing fast.
	14 15	3.5	761.60	29.964	32.1	32.	.193	(A. 32.)	93.5	NE. by E.	..	..	8	N., snowing fast.
	16 15	4.3	760.45	29.916	32.	32.	.199	(A. 32.)	93.5	ENE.	..	..	8	N., snowing fast.
	18 15	4.	760.00	29.900	31.2	31.2	.194	9 P. M.: (D. 28.)	92.	ENE.	..	..	8	N., snowing fast.
	20 15	3.3	759.60	29.886	30.6	30.	.180	(A. 31.6)	92.	ENE.	..	..	8	N., snowing fast.
	22 15	3.	758.75	29.855	31.2	30.	.174	.....	88.	ENE.	..	..	8	N., stopped snowing.

* Snow melted, and the amount is shown by the gauge.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Beaumure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
44	13	2.7	757.35	29.801	31.	29.5	...	3 A. M.: (D. 37.4)	86.9	...	...	...	8	N., Ci cu.
	2	2.4	757.95	29.827	31.	29.5	167	(A. 31.)	84.4	NNE.	...	...	8	N., Cu., Ci., Ci-cu.
	4	2.4	759.15	29.873	32.1	30.7	176	9 A. M.: (D. 30.)	84.8	NNW.	...	...	8	N., snowing.
	6	4.	759.35	29.874	34.9	32.2	171	(A. 37.)	78.8	NNW.	...	...	1	Cl., Ci-s.
	8	6.8	759.75	29.875	38.8	35.2	183	3 P. M.: (D. 30.)	79.1	NW.	...	...	7	Cl., Ci-s., S., Ci-cu.
	10	8.5	759.25	29.847	42.2	30.9	177	(D. 30.)	71.8	NW.	...	...	7	Ci-cu., Ci-s.
	12	8.5	759.05	29.834	44.1	38.2	181	(A. 44.5)	70.5	NW by W.	...	...	5	Cl., Ci-cu., Ci-s.
	14	9.7	759.10	29.834	45.5	40.5	213	9 P. M.: (D. 30.)	71.	WSW.	...	...	1	Cl., Ci-cu., Ci-s.
	16	10.	758.65	29.817	43.4	39.6	218	(A. 38.)	74.	SW by W.	...	...	...	Cu-s. in W. Hor.
	18	9.9	758.55	29.819	38.5	36.	202	(D. 30.)	83.	SW by S.	...	...	...	Cu-s. in W. Hor.
14	20	8.8	757.95	29.800	38.	35.7	201	3 A. M.: (D. 32.9)	84.1	SSW.	...	...	8	N., raining.
	22	8.	757.00	29.765	40.	37.5	214	(A. 34.9)	93.	S. by E.	...	...	8	N., snowing.
	0	7.5	757.20	29.775	37.1	36.1	219	9 A. M.: (D. 38.1)	92.	NE. by E.	...	...	8	N., snowing.
	2	7.	756.10	29.695	33.7	33.3	205	(A. 37.)	81.8	NNW.	...	...	6	Cu., Ci-cu.
	4	6.3	755.10	29.724	32.2	33.	205	3 P. M.: (D. 33.2)	78.7	NNW.	...	...	3	Cu., Ci-cu.
	6	5.9	755.75	29.724	32.2	33.	205	(A. 47.)	72.1	NNW.	...	...	1	Cu., Ci-cu.
	8	6.4	758.75	29.839	36.1	35.2	213	9 P. M.: (D. 26.)	63.2	NNW.	...	...	...	Cu., Ci-cu.
	10	7.6	761.65	29.948	38.6	36.7	214	(A. 37.5)	63.2	NNW.	...	...	6	Cu., Ci-cu.
	12	8.7	761.45	29.934	42.1	38.6	213	(D. 26.)	66.3	NNW.	...	...	...	Clear.
	14	9.6	761.85	29.945	45.	40.1	216	(A. 37.5)	66.3	NNW.	...	...	...	Clear.
44	16	9.9	762.45	29.966	46.5	43.5	243	(A. 37.5)	66.3	NNW.	...	...	...	Clear.
	18	10.7	764.55	30.046	42.5	39.7	231	(D. 26.)	66.3	NNW.	...	...	...	Clear.
	20	8.9	766.80	30.144	40.	38.	128	(A. 37.5)	66.3	NNW.	...	...	...	Clear.
	22	7.7	767.85	30.190	36.5	31.	136	(A. 37.5)	66.3	NNW.	...	...	...	Clear.

* Gauge shows melted snow.

Date.		Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gausse's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
16	15	a. m.												
	0	15	6.7	768.35	30.215	34.3	29.9	.140	3 A. M.:	66.7	NW.	..	..	Clear.
	2	15	5.7	768.70	30.233	32.5	28.2	.130	(D. 21.4)	69.	NW.	..	..	Clear.
	4	15	4.8	769.45	30.267	30.8	27.	.128	(A. 32.)	68.1	NW.	..	..	Clear.
	6	15	4.5	770.80	30.322	32.3	29.4	.153	.....	67.	NW.	..	..	Clear.
	8	15	5.4	772.40	30.379	35.2	29.7	.128	.....	64.4	NW.	..	..	Clear.
	10	15	6.	773.00	30.400	37.9	32.	.139	.....	63.	NNW.	..	..	Clear.
	12	15	7.1	772.80	30.387	41.5	34.2	.132	.....	62.2	NNW.	..	..	Clear.
	14	15	8.	772.35	30.364	45.	37.	.146	.....	60.5	NW.	..	..	Clear.
	16	15	9.3	772.25	30.354	46.6	37.6	.140	.....	58.4	WNW.	..	..	Clear.
	18	15	9.6	772.75	30.373	45.1	39.3	.192	.....	61.2	WNW.	..	..	Clear.
	20	15	9.	773.35	30.400	39.	34.	.157	.....	65.1	WNW.	..	..	Clear.
	22	15	8.	773.35	30.404	35.	31.5	.160	.....	71.	WNW.	..	..	Clear.
	0	15	7.	773.60	30.421	32.4	29.5	.152	.....	74.1	NW. by N.	..	..	Clear.
	2	15	6.1	773.50	30.420	29.6	28.3	.162	.....	86.	NW. by N.	..	..	Clear.
	4	15	5.2	773.80	30.436	29.2	28.1	.162	.....	86.8	NW. by N.	..	..	1 Ci-a.
	6	15	5.	774.35	30.459	32.9	31.	.173	.....	84.	NW. by N.	..	..	3 Ci-a.
	8	15	6.3	775.00	30.478	42.4	38.9	.215	.....	79.	SW. by S.	..	..	1 Ci, Ci-a.
	10	15	7.9	774.60	30.454	47.4	41.5	.211	.....	67.3	SW.	..	..	1 Ci, Ci-a.
	12	15	10.9	773.85	30.412	52.6	44.4	.214	.....	64.	SSW.	..	..	2 Ci, Ci-a.
	14	15	11.3	772.85	30.349	52.9	44.2	.207	(D. 34.5)	63.3	SW.	..	..	6 Ci, Ci-cu, Ci-a, S., Cu.
	16	15	12.	771.60	30.317	54.9	46.	.225	(A. 53.)	65.	SSW.	..	..	1 Ci, Ci-cu, Ci-a.
18	15	12.	771.00	30.293	47.8	43.3	.246	9 P. M.:	71.3	SSW.	..	..	1 S., Cu-a.	
20	15	11.	771.00	30.298	42.5	39.2	.219	(D. 34.)	75.	SSW.	..	..	Clear.	
22	15	10.1	770.00	30.262	40.7	38.6	.228	(A. 41.6)	85.	S.	..	..	1 Ci-cu.	

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

. April.]

Date.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Beaum'rs.	Wind.		Rain, inches.	Sky covered, eths.	Clouds, &c.
		Temperat'ure,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
17	a. m.													
	0 15	9.5	769.05	30.228	43.	40.5	.241	3 A. M.: 84.3	84.3	SSW.	..	..	8	Very dark.
	2 15	9.2	767.90	30.185	43.8	42.	.263	(D. 39.3) 88.	88.	S. by W.	..	..	8	Very dark.
	4 15	9.1	768.90	30.146	44.6	43.5	.287	(A. 44.4) 91.2	91.2	SSW.	..	..	8	N., raining.
	6 15	9.2	766.15	30.116	46.3	45.6	.313	9 A. M.: 92.7	92.7	SSW.	..	.01	8	N., Ci., Ci-cu.
	8 15	10.	765.45	30.084	49.	48.2	.342	(D. 43.5) 92.3	92.3	SSW.	..	..	8	N.
	10 15	10.4	764.80	30.049	51.9	51.	.377	(A. 49.6) 92.	92.	SW.	..	..	8	N.
	12 15	11.3	763.00	29.981	55.	53.5	.404	3 P. M.: 89.5	89.5	SW.	..	..	8	N., Ci-cu.
	14 15	12.2	762.00	29.938	57.7	55.	.412	(D. 52.5) 86.	86.	SW.	..	..	8	N., Ci-cu.
	16 15	13.7	760.80	29.885	58.3	56.	.432	(A. 58.6) 87.2	87.2	SW.	..	..	8	N., Ci-cu.
	18 15	14.1	760.50	29.871	56.5	55.	.425	9 P. M.: 91.	91.	S. by W.	..	..	8	N., Ci-cu.
	20 15	14.1	759.75	29.841	55.	54.5	.439	(D. 52.) 93.2	93.2	S.	..	..	8	N., Ci-cu.
19	22 15	14.	757.25	29.743	54.3	54.2	.430	(A. 54.9) 94.5	94.5	S.	..	..	8	N., Ci-cu.
	0 15	10.7	762.40	29.961	37.	31.6	.141	3 A. M.: 64.1	64.1	NW. by W.	..	..	..	Hazy.
	2 15	9.4	762.90	29.987	35.5	30.5	.136	(D. 22.9) 66.	66.	NW. by W.	..	..	..	Clear.
	4 15	8.2	763.60	30.019	35.	29.8	.131	(A. 35.5) 66.4	66.4	NW. by W.	..	..	..	Clear.
	6 15	7.7	765.10	30.081	35.5	29.6	.123	..... 65.7	65.7	NNW.	..	..	..	Clear.
	8 15	8.5	765.90	30.109	38.7	31.5	.133	..... 63.5	63.5	WNW.	..	..	..	Clear.
	10 15	9.2	766.15	30.116	43.	35.5	.141	..... 63.	63.	WNW.	..	..	..	Clear.
	12 15	10.2	765.10	30.069	48.	39.5	.163	3 P. M.: 60.5	60.5	WSW.	..	..	..	Clear.
	14 15	11.	763.75	30.012	52.4	43.1	.199	(D. 29.8) 57.5	57.5	SW.	..	..	..	Clear.
	16 15	12.	763.10	29.982	53.5	43.6	.188	(A. 53.5) 59.5	59.5	SW.	..	..	..	Clear.
	18 15	12.6	763.00	29.976	49.	41.8	.199	9 P. M.: 62.1	62.1	SW.	..	..	..	Clear.
	20 15	11.4	763.40	29.937	41.4	39.1	.230	(D. 37.) 83.	83.	S. by W.	..	..	..	Clear.
	22 15	10.5	763.35	29.939	41.5	40.	.247	(A. 40.6) 89.8	89.8	SSW.	Clear.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Date.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
20	y.													
	0 15	9.9	768.40	30.003	40.	38.6	.236	3 A. M.: (D. 36.1)	88.9	SW.			1	Cl-s.
	2 15	9.3	763.15	29.996	41.5	39.6	.239	(A. 41.5)	88.3	SW.			1	Cl-s, hazy.
	4 15	8.8	763.30	30.005	41.3	39.7	.244	(A. 41.5)	89.1	S. by W.			8	N., (?) Cl-s, Cl-cu.
	6 15	8.7	763.70	30.022	43.5	41.5	.256	9 A. M.: (D. 35.5)	87.2	SSW.			8	N., (?) Cl-s.
	8 15	9.6	764.40	30.045	49.8	44.3	.244	(D. 35.5)	75.	SSW.			8	Cl, Cl-s.
	10 15	10.2	764.40	30.042	53.	46.	.246	(A. 52.3)	71.1	SW.			8	Cl, Cl-s.
	12 15	10.8	764.35	30.038	51.	47.4	.301	3 P. M.: (D. 35.2)	82.	WSW.		.02	8	N., Cl-cu, Cl-s, rain.
	14 15	11.	764.00	30.022	49.5	48.4	.342	(A. 50.1)	92.1	SW.		.03	8	N., Cl-cu, Cl-s, rain.
	16 15	11.1	762.90	29.979	49.7	47.	.307	(A. 50.1)	87.	SSE.		.11	8	N., raining.
	18 15	11.1	762.20	29.951	49.1	47.6	.327	9 P. M.: (D. 47.5)	89.	SE.		.01	8	N., raining.
	20 15	11.1	762.00	29.943	48.7	48.1	.343	(D. 47.5)	92.	ESE.		.05	8	N., raining.
15	22 15	11.1	761.60	29.928	49.	48.5	.349	(A. 49.2)	92.7	ESE.		.03	8	N., raining.
	0 15	11.2	760.90	29.901	48.5	48.2	.348	3 A. M.: (D. 43.)	92.8	E.		.04	8	N., raining.
	2 15	11.1	759.65	29.851	48.1	48.	.348	(D. 43.)	92.2	E. by N.		.08	8	N., raining.
	4 15	11.1	758.65	29.812	48.5	48.	.343	(A. 48.1)	92.9	NE. by E.		.01	8	N., raining.
	6 15	11.1	758.85	29.820	48.5	48.1	.346	9 A. M.: (D. 48.5)	90.	NE. by N.			8	N.
	8 15	11.7	758.90	29.819	50.7	49.6	.356	(D. 48.5)	87.2	NNE.			8	N.
	10 15	12.4	759.60	29.843	54.	51.6	.367	(A. 51.6)	83.	NE.			8	N.
	12 15	14.	760.00	29.852	53.6	50.3	.330	.....	80.5	N.			8	N., Cl-cu, Cu-s.
	14 15	14.	760.20	29.860	54.5	50.3	.314	.....	89.	NNW.			8	N., Cl-cu, Cu-s.
	16 15	14.	761.75	29.921	48	46.5	.314	.....	81.	NNW.			8	N., raining.
	18 15	13.2	762.60	29.956	46.9	43.1	.251	9 P. M.: (D. 37.3)	81.	NNW.			3	N., Cl-cu.
	20 15	12.6	763.10	29.980	44.5	41.	.285	(A. 43.2)	81.	NNW.			3	Cl, Cl-cu.
	22 15	11.6	764.10	30.023	42.2	39.3	.221		81.8	NNW.			4	

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges's.	Wind.		Rain, inches.	Sky covered, Eths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
22	0	15	763.80	30.014	41.4	38.5	.218	.....	82.	NNW.	..	..	4	>
	1	15	763.90	30.019	41.	38.4	.220	.....	83.	NNW.	..	..	5	Ci., Ci-cu.
	2	15	763.65	30.013	40.	37.5	.214	.....	85.	N.	..	..	2	Ci., Ci-cu.
	4	15	763.65	30.013	40.	37.5	.214	.....	85.	N.	..	..	2	Ci., Ci-cu.
	6	15	763.80	30.018	43.5	41.6	.258	.....	82.	NNE.	..	..	7	Ci., Ci-cu.
	8	15	764.00	30.022	46.	42.	.237	(D. 35.8)	79.	NE.	..	..	8	Cu., Ci-cu., Cu-s.
	10	15	764.15	30.030	46.2	42.2	.239	(A. 45.6)	79.	ENE.	..	..	8	Cu., Ci-cu., Cu-s.
	12	15	763.15	29.988	49.8	45.1	.262	3 P. M.: (D. 39.4)	77.	ENE.	..	..	8	Cu., Ci-cu., Cu-s.
	14	15	763.15	29.987	48.3	43.6	.246	(D. 39.4)	77.	NE.	..	..	8	Cu., Ci-cu., Cu-s.
	16	15	761.60	29.927	46.3	44.1	.280	(A. 48.1)	84.5	NE.	..	..	8	Ci-cu., N., raining.
	18	15	761.85	29.938	45.	43.9	.291	9 P. M.: (D. 42.)	90.6	NNE.	..	..	8	Ci-cu., N., occasional showers.
	20	15	761.40	29.924	44.4	43.2	.282	(D. 42.)	92.4	NNE.	..	..	8	Ci-cu., N., occasional showers.
	22	15	760.35	29.884	43.9	42.9	.281	(A. 43.5)	91.7	NE.	..	..	8	Ci-cu., N., occasional showers.
23	0	15	759.90	29.868	44.	43.4	.291	3 A. M.: (D. 43.6)	92.2	NE.	..	..	8	N., showers.
	2	15	759.20	29.841	44.5	43.8	.294	(D. 43.6)	91.9	NE. by E.	..	..	8	N., showers.
	4	15	758.85	29.828	45.5	44.9	.306	(A. 44.9)	92.3	NE. by E.	..	..	8	N., showers.
	6	15	759.40	29.849	47.5	47.	.331	9 A. M.: (D. 49.)	92.	NE. by E.	..	..	8	N.
	8	15	760.00	29.870	50.	49.5	.361	(D. 49.)	92.3	ENE.	..	..	8	N.
	10	15	761.00	29.904	52.7	51.7	.385	(A. 51.3)	91.	ENE.	..	..	8	N., Ci-cu.
	12	15	761.30	29.911	55.	54.	.417	3 P. M.: (D. 53.)	90.5	ENE.	..	..	8	N., Ci-cu.
	14	15	761.10	29.900	55.	54.2	.422	(D. 53.)	90.5	ENE.	..	..	8	N., Ci-cu.
	16	15	761.30	29.905	56.	54.	.417	(A. 55.1)	91.	ENE.	..	..	8	N.
	18	15	762.25	29.940	52.9	52.3	.397	9 P. M.: (D. 48.3)	93.	ENE.	..	..	8	N.
	20	15	762.70	29.959	51.3	50.5	.371	(D. 48.3)	92.3	ENE.	8	N., light rain.
	22	15	763.00	29.973	49.6	49.4	.364	(A. 50.4)	94.	ENE.	8	N., light rain.

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DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Day.	Hour.	Barometer.			Therm'ms, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temp., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
24	0	15	762.80	29.967	48.6	48.5	.354	3 A. M.: (D. 47.1)	93.2	E. by N.	..	..	8	N., very light rain.
	2	15	762.70	29.966	48.1	48.1	.350	(A. 47.4)	93.1	ENE.	..	.01	8	N., very light rain.
	4	15	762.85	29.973	47.3	47.1	.336	9 A. M.: (D. 48.7)	92.8	ENE.	..	.01	8	N., very light rain.
	6	15	763.25	29.988	48.4	48.1	.347	(A. 52.1)	92.3	ENE.	..	..	8	N., very light rain, (fog.)
	8	15	763.25	29.987	50.5	49.3	.352	3 P. M.: (D. 53.7)	90.	ENE.	..	..	8	N., Ci-cu., Cu-s.
	10	15	763.60	29.998	53.2	51.5	.374	(A. 61.)	89.	ENE.	..	..	8	N., Ci-cu., Cu-s.
	12	15	763.60	29.995	56.	54.	.406	(D. 54.)	88.	ENE.	..	..	8	N., Ci-cu., Cu-s.
	14	15	763.40	29.981	58.6	55.8	.424	(A. 56.1)	86.	ENE.	..	..	8	N., Ci-cu., Cu-s.
	16	15	762.80	29.955	59.9	57.	.441	9 P. M.: (D. 54.)	85.3	NNE.	..	..	8	N., Ci-cu., Cu-s.
	18	15	762.80	29.950	58.9	56.5	.438	(A. 56.1)	88.1	NNE.	..	..	8	N., Ci-cu., Cu-s.
	20	15	762.70	29.947	56.1	54.9	.428	(A. 56.1)	91.5	NNE.	..	..	8	N., Ci-cu., Cu-s.
	22	15	762.75	29.951	56.	55.	.431	3 A. M.: (D. 46.2)	91.5	NNE.	..	..	8	N. (and S.?)
26	0	15	763.00	29.962	47.9	47.3	.333	3 A. M.: (A. 47.5)	92.2	NE. by E.	..	..	8	Overcast.
	2	15	762.20	29.934	47.4	46.9	.330	(D. 46.2)	93.6	NE. by E.	..	..	8	Overcast.
	4	15	761.60	29.915	47.	46.7	.330	9 A. M.: (A. 47.5)	93.7	NE.	..	..	8	Overcast, (foggy.)
	6	15	761.75	29.921	48.5	48.	.343	(D. 47.8)	93.	NE.	..	..	8	Overcast, (foggy.)
	8	15	761.50	29.911	49.7	48.7	.346	(A. 51.)	91.5	NE.	..	..	8	N., Ci-s., S.
	10	15	760.80	29.884	52.3	50.3	.355	3 P. M.: (A. 63.3)	88.	NE.	..	..	8	N., Ci-s., S.
	12	15	759.40	29.822	57.4	53.7	.362	(D. 53.4)	83.	S.	..	..	8	Foggy.
	14	15	758.00	29.763	60.8	56.6	.420	(A. 63.3)	81.	S. by W.	..	..	3	Cu., Ci., Ci-s.
	16	15	756.70	29.703	65.	60.2	.473	(A. 63.3)	79.5	SSW.	..	..	6	Cu., Ci., Ci-s.
	18	15	756.10	29.678	59.4	56.5	.433	(A. 63.3)	85.1	SW. by S.	..	..	4	Ci-cu., Cu.
	20	15	755.70	29.668	53.	51.6	.378	(A. 63.3)	85.1	S. by W.	3	Ci-cu., Cu.
	22	15	754.70	29.634	50.7	49.8	.361	(A. 63.3)	93.3	S.	7	Ci-cu., Cu.

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DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

Day.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hyg', Gaussure's.	Wind.		Rain, inches.	Sky covered, eths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
27	h. m.	0 15 15.5	753.90	29.605	50.	49.2	.354	3 A. M.: (D. 48.3)	93.2	S.	..	..	8	N.
		2 15 14.4	753.00	29.574	49.	48.5	.349	(A. 49.5)	93.3	SSE.	..	..	8	N., raining.
		4 15 14.3	753.45	29.592	50.	49.5	.361	(A. 49.5)	94.	SW.	..	..	8	N., raining.
		6 15 14.	753.60	29.600	50.7	50.4	.376	9 A. M.: (D. 51.5)	93.8	WSW.	..	.25	8	N., raining.
		8 15 14.	753.30	29.588	52.	51.7	.393	(D. 51.5)	93.2	S. by W.	..	.18	8	N., raining.
		10 15 14.	754.10	29.620	49.5	46.	.387	(A. 54.)	81.3	NNW.	..	.03	8	Cu., Ci., Ci-cu.
		12 15 14.8	754.80	29.645	55.3	48.3	.374	3 P. M.: (D. 39.)	71.5	NNW.	..	..	2	Cu., Cu-a.
		14 15 15.	755.40	29.667	55.6	46.8	.235	(D. 39.)	65.5	NNW.	..	..	2	Cu., S.
		16 15 15.3	756.10	29.691	55.5	45.5	.208	(A. 55.3)	63.	NNW.	..	..	2	Cu., S.
		18 15 15.	757.15	29.734	50.	45.	.358	9 P. M.: (D. 34.)	69.	NNW.	..	..	3	Cu., S.
28	h. m.	20 15 14.2	759.20	29.817	48.4	41.4	.200	(D. 34.)	66.	NW by N.	..	..	..	Clear.
		22 15 13.	760.85	29.890	44.2	37.5	.167	(A. 44.2)	68.4	NNW.	..	..	..	Clear.
		0 15 12.	760.35	29.875	42.5	36.4	.165	3 A. M.: (D. 26.3)	67.5	NW.	..	..	..	Clear.
		2 15 10.9	760.90	29.903	38.3	35.	.185	(D. 26.3)	74.	NW.	..	..	..	Clear.
		4 15 10.	761.50	29.929	40.5	35.	.160	(A. 38.5)	71.1	NW.	..	..	..	Clear.
		6 15 10.	762.70	29.976	42.5	36.5	.167	9 A. M.: (D. 31.3)	71.	NW.	..	..	8	Ch., Ci-a.
		8 15 10.7	762.90	29.981	47.	40.	.185	(D. 31.3)	67.5	N.	..	..	6	Ch., Ci-a.
		10 15 11.9	763.00	29.978	52.8	44.5	.215	(A. 50.)	64.5	NNW.	..	..	4	Ch., Ci-a.
		12 15 13.	762.60	29.958	56.1	45.3	.198	3 P. M.: (D. 38.)	61.	NNW.	..	..	7	Ch., Ci-a.
		14 15 14.9	761.30	29.897	59.6	48.	.219	(D. 38.)	59.	WNW.	..	..	6	Ch., Ci-a., Ci-cu.
		16 15 16.	760.70	29.870	58.8	48.5	.240	(A. 60.5)	59.5	WSW.	..	..	6	Ch., Ci-a., Ci-cu.
		18 15 15.9	760.50	29.862	54.2	46.9	.254	9 P. M.: (D. 35.5)	65.1	W. by N.	..	..	8	Ch., Ci-a., Ci-cu.
		20 15 15.1	761.00	29.885	50.5	44.	.231	(D. 35.5)	68.	WSW.	..	..	8	Ch., Ci-a.
		22 15 14.3	760.90	29.885	48.2	43.	.235	(A. 47.)	71.6	WSW.	Clear.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Day.	Hour.	Barometer.			Therm'ns, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.				Dir. points.	Force, lbs.			
29	a. w.													
	0 15	13.3	760.10	29.858	44.4	41.	.236	3 A. M.: (D. 38.)	76.8	WSW.	..	..	3	Cl., Ci-s.
	2 15	12.2	759.15	29.826	42.6	41.	.256	(A. 41.9)	86.4	SW.	..	..	..	Clear.
	4 15	11.3	758.30	29.897	40.6	39.4	.246	9 A. M.: (D. 43.1)	89.2	SW.	..	..	6	Cl., Ci-s.
	6 15	11.1	757.80	29.779	42.	40.5	.252	(A. 46.6)	88.3	E. by N.	..	..	8	Cl., Ci-s., Ci-cu., Cu-s.
	8 15	11.2	756.80	29.739	46.4	44.1	.279	(A. 43.5)	86.	S. by E.	..	..	8	N., Ci cu., Ci s., rain.
	10 15	11.	755.40	29.685	46.	43.	.259	3 P. M.: (D. 40.5)	86.5	SE. by E.	..	.08	8	N., raining.
	12 15	10.5	753.65	29.580	44.	42.5	.271	(A. 43.5)	90.	E.	..	.19	8	N., raining.
	14 15	10.1	747.60	29.363	43.	42.4	.280	9 P. M.: (D. 42.5)	92.5	E.	..	.23	8	N., raining.
	16 15	10.1	744.55	29.262	43.9	43.	.283	(A. 45.6)	93.	E.	..	.60	8	N., raining.
	18 15	10.	741.85	29.167	45.6	45.4	.317	(A. 45.6)	94.	E.	..	.35	8	N., raining.
	20 15	10.	739.50	29.064	46.	45.4	.312	(A. 45.6)	91.3	E.	..	.11	8	N., ceased raining.
	22 15	10.	738.15	29.011	45.5	44.1	.290	3 A. M.: (D. 41.3)	93.1	N.	..	..	8	N., raining slightly.
	0 15	10.	737.15	28.971	44.6	44.	.297	(A. 44.6)	92.5	NW.	..	..	8	N., raining slightly.
	2 15	10.	737.00	28.965	44.5	43.6	.290	(A. 44.6)	92.	WNW.	..	..	8	N., raining slightly.
	4 15	9.8	736.60	28.952	44.5	43.8	.294	.....	91.3	WNW.	..	..	8	N., raining slightly.
	6 15	9.8	736.55	28.950	45.5	44.	.288	.....	88.	W. by N.	..	..	8	N., Cu., Ci-cu.
	8 15	10.2	737.00	28.964	47.8	44.7	.277	.....	82.3	WNW.	..	..	8	Cu., Cu-s., Ci-cu.
	10 15	10.5	737.20	28.971	48.5	45.	.275	.....	81.	WNW.	..	..	8	Ci-cu., N.
	12 15	11.3	737.25	28.969	49.5	46.7	.302	4 P. M.: (D. 44.8)	83.5	WNW.	..	..	8	Cu., Ci-cu., N.
	14 15	11.7	737.90	28.993	49.7	47.	.307	(A. 49.)	83.5	WNW.	..	..	8	Cu., Ci-cu., N.
	16 15	12.	739.50	29.055	49.	46.4	.301	9 P. M.: (D. 39.)	84.8	NW.	..	.08	8	Cu., Ci-cu., N.
	18 15	11.6	741.50	29.135	48.	43.	.238	(A. 45.)	76.8	NW.	..	..	8	Cu., Ci cu., Ci-s.
	20 15	11.	742.95	29.194	45.6	41.5	.234	.....	76.	NW.	..	..	8	Cu., Ci-cu., Ci-s.
	22 15	10.2	744.00	29.239	44.5	43.6	.290	.....	75.5	NW.	..	..	5	Cu., Ci-cu., Ci-s., halo.

* Recorded 94.8.

† Light showers, and gauge shows the total.

Max.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1941.

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Day.	Hour.	Barometer.			Therm'n, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Beaumore's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.	
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.				
1	0	9.8	744.95	29.280	44.1	41.1	.242	3 A. M.: 76.1	WNW.	WNW.	WNW.	..	8	N. Cu., Ci-cu.	
	2	9.6	745.25	29.292	44.	40.5	.230	(D. 37.1) 78.2	WNW.	WNW.	WNW.	..	8	N. Cu., Ci-cu.	
	4	9.3	745.85	29.317	44.5	41.	.235	(A. 43.6) 79.3	W.	W.	W.	..	8	N. Cu., Ci-cu.	
	6	9.2	747.10	29.367	45.1	42.	.249	9 A. M.: 80.	W.	W.	W.	..	8	N. Cu., Ci-cu.	
	8	9.6	748.85	29.434	47.	41.5	.218	(D. 35.) 74.	WNW.	WNW.	WNW.	..	8	N. Cu., Ci-cu.	
	10	10.3	749.30	29.448	49.	43.3	.234	(A. 47.6) 75.3	WNW.	WNW.	WNW.	..	8	N. Cu., Ci-cu.	
	12	11.	750.00	29.472	49.4	43.	.223	3 P. M.: 70.	WNW.	WNW.	WNW.	..	8	N. Cu., Ci-cu.	
	14	11.9	750.85	29.502	50.7	43.8	.226	(D. 36.) 66.9	WNW.	WNW.	WNW.	..	8	N. Cu., Ci-cu.	
	16	12.1	751.80	29.538	51.1	44.2	.229	(A. 50.8) 66.1	WNW.	WNW.	WNW.	..	8	N. Cu., Ci-cu.	
	18	13.1	752.75	29.572	51.4	43.8	.217	3 P. M.: 71.2	NW.	NW.	NW.	..	8	N. Cu., Ci-cu.	
	20	13.	754.70	29.654	46.5	41.9	.231	(D. 32.) 81.	N. by W.	N. by W.	N. by W.	..	8	N. Cu., Ci-cu.	
	22	11.4	755.70	29.695	42.5	39.9	.234	(A. 43.) 64.8	N. by W.	N. by W.	N. by W.	..	8	N. Cu., Ci-cu.	
	3	0	6.9	757.00	29.767	34.3	31.	.159	3 A. M.: 66.	WNW.	WNW.	WNW.	..	8	N. Cu., Ci-cu.
		2	5.9	756.85	29.767	33.1	29.2	.141	(D. 20.7) 68.	WNW.	WNW.	WNW.	..	8	N. Cu., Ci-cu.
		4	4.8	757.55	29.800	32.	28.	.133	(A. 32.5) 68.	NW.	NW.	NW.	..	8	N. Cu., Ci-cu.
		6	4.7	758.60	29.841	33.	28.1	.124	NW.	NW.	NW.	..	8	N. Cu., Ci-cu.
8		5.3	758.60	29.838	35.1	29.6	.128	.....	NW.	NW.	NW.	..	8	N. Cu., Ci-cu.
10		5.5	759.20	29.860	39.3	35.8	.189	.....	NW.	NW.	NW.	..	8	N. Cu., Ci-cu.
12		7.5	758.50	29.824	43.5	36.2	.149	.....	NW.	NW.	NW.	..	8	N. Cu., Ci-cu.
14		8.	757.95	29.800	46.5	43.	.254	.....	NW.	NW.	NW.	..	8	N. Cu., Ci-cu.
16		9.5	758.05	29.796	47.8	40.9	.196	.....	NW.	NW.	NW.	..	8	N. Cu., Ci-cu.
18		9.9	759.00	29.880	44.5	39.4	.202	.....	NW.	NW.	NW.	..	8	N. Cu., Ci-cu.
20	9.1	760.00	29.874	40.4	34.2	.146	.....	NW.	NW.	NW.	..	8	N. Cu., Ci-cu.	
22	15	8.1	760.25	29.890	37.8	32.5	.144	.....	NW.	NW.	..	8	N. Cu., Ci-cu.	

[1841.

DAILY METEOROLOGICAL OBSERVATIONS.

Mar.]

Date.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Sausure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
4	4	7.3	759.95	29.882	37.	32.5	.153	3 A. M.: (D. 22.4) (A. 35.5)	69.6	NW. by N.	..	..	4	Cu., Ci., Ci-a.
	2	6.8	759.25	29.855	35.6	31.6	.156		72.8	N. by W.	..	..	..	Clear.
	4	6.3	759.20	29.856	34.9	30.7	.148		72.8	NW. by W.	..	..	..	Clear.
	6	15	759.50	29.868	36.9	33.	.163		74.	NNW.	..	..	..	Clear.
	8	15	759.30	29.853	39.9	34.	.148		69.6	NW.	..	..	2	Ci., Ci-a.
	10	15	758.80	29.830	42.5	36.	.157		68.2	NW.	..	..	1	Cu.
	12	15	758.00	29.794	45.5	39.	.182	3 P. M.: (D. 25.) (A. 49.5)	66.7	NW.	..	..	..	Clear.
	14	15	757.65	29.778	48.1	41.5	.205		65.8	WNW.	..	..	..	Detached Cu.
	16	15	757.45	29.764	51.5	42.5	.187		63.6	WNW.	..	..	..	Ci. cu., Ci-a.
	18	15	757.65	29.769	50.	43.	.215	9 P. M.: (D. 28.) (A. 44.5)	64.	NW.	..	..	..	Ci. cu., Ci-a., Ci.
	20	15	758.60	29.828	42.5	37.4	.184		69.8	NNE.	..	..	..	Ci. cu., Ci-a., Ci.
5	22	15	759.00	29.828	42.5	37.4	.193		73.1	NE.	..	..	..	Ci. cu., Ci-a., Ci.
	0	15	759.50	29.852	37.6	35.	.190	3 A. M.: (D. 30.3)	77.1	NE.	..	..	1	Ci. Ci-a.
	2	15	758.85	29.831	34.5	33.	.190		85.	NE.	..	..	..	Clear.
	4	15	759.00	29.841	32.5	31.5	.186		90.8	NE.	..	..	..	Light Ci. and Ci-a.
	6	15	759.35	29.854	38.2	36.	.205	9 A. M.: (D. 33.5)	84.3	NE.	..	..	6	Light Ci. and Ci-a.
	8	15	759.85	29.867	47.2	41.4	.213		82.	ESE.	..	..	5	Light Ci. and Ci-a.
	10	15	759.25	29.835	51.8	44.5	.227	(A. 48.8)	67.5	ESE.	..	..	1	Light Ci. and Ci-a.
	12	15	758.60	29.804	55.5	48.	.265	3 P. M.: (D. 41.)	64.	SE.	..	..	8	Ci., Ci-a., Ci-cu.
	14	15	758.50	29.797	51.6	47.2	.290		77.	WSW.	..	..	8	N., raining.
	16	15	757.00	29.741	48.1	46.5	.313	(A. 49.6)	88.	SE.	..	.07	8	N., raining.
	18	15	756.40	29.719	45.5	44.5	.298		93.1	SSE.	..	.15	8	N., raining.
	20	15	755.90	29.703	44.5	43.5	.288		92.3	SE.	..	.10	8	N., raining.
	22	15	755.70	29.695	44.5	43.8	.294		94.	ESE.	..	.10	8	N., ceased rain.

Mar.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Day.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
9	h.	10.9	755.35	29.985	44.	43.5	.303	3 A. M.: (D. 42.)	94.	E. by S.	..	.03	8	N., raining.
		10.7	755.25	29.681	44.1	43.6	.294	(A. 44.)	94.1	E. by N.	..	.01	8	N., raining.
		10.3	755.90	29.708	42.8	43.2	.278	9 A. M.: (D. 34.)	94.	W.	..	..	8	N., raining.
		10.6	756.65	29.736	45.	43.9	.291	9 A. M.: (D. 34.)	90.2	W.	..	..	4	Ci-a.
		12.	757.80	29.775	49.8	43.	.222	(D. 34.)	72.	WNW.	..	..	2	Cu.
		12.6	758.10	29.784	52.5	44.5	.219	(A. 51.)	68.	WNW.	..	..	2	Cu.
		13.5	758.60	29.798	53.3	44.3	.206	3 P. M.: (D. 38.5)	65.	WNW.	..	..	6	Cu., Ci-cu.
		14.	759.00	29.811	55.2	46.5	.234	(D. 38.5)	66.	WNW.	..	..	7	Cu., Ci-cu.
		15.2	759.75	29.835	56.1	45.9	.210	(A. 56.4)	63.	WNW.	..	..	4	Cu., Ci-cu.
		15.2	760.35	29.859	54.4	46.	.232	9 P. M.: (D. 33.)	63.8	WNW.	..	..	4	Cu., Ci-cu.
		14.2	762.55	29.951	49.3	43.	.234	(D. 33.)	69.2	W. by N.	..	..	4	Cu., Ci-cu.
		13.4	763.10	29.975	46.8	42.4	.238	(A. 48.)	72.7	W. by N.	..	..	..	A little Cu. in S.
		12.3	763.55	29.999	44.	40.5	.229	3 A. M.: (D. 32.8)	78.	W.	..	..	..	Ci-cu. in S.
		11.5	763.95	30.019	44.	39.3	.204	(D. 32.8)	76.	W.	..	..	4	Ci-a.
		10.8	764.05	30.036	42.1	38.	.199	(A. 43.5)	76.8	NW. by N.	..	..	4	Ci-cu., Ci-a.
		10.8	765.35	30.077	45.2	40.5	.215	9 P. M.: (D. 31.5)	75.2	WNW.	..	..	3	Ci., Cu., Ci-cu.
		12.	765.50	30.077	49.5	42.1	.200	(A. 50.7)	70.	WNW.	..	..	..	Clear.
		13.	765.40	30.068	53.	44.5	.212	(A. 50.7)	67.5	NW.	..	..	3	Light Ci., Ci-a., and Ci-cu.
		14.5	764.80	30.038	56.5	49.2	.281	.....	65.3	W.	..	..	8	Ci., Ci-cu., Ci-a.
		15.	764.30	30.015	59.	50.8	.287	.....	67.	.....	..	..	8	Ci., Ci-cu., Ci-a.
		15.3	763.95	30.000	56.5	49.	.254	.....	67.6	E.	..	..	8	Ci., Cu-a., N.
		15.2	763.30	29.974	54.	47.5	.270	.....	72.3	NE. by N.	..	..	8	Ci., Cu-a., N.
		15.	762.20	29.932	52.	46.8	.276	.....	78.	NE.	..	..	8	N., Cu., Ci-cu.
		14.3	762.20	29.937	49.	47.	.315	.....	90.	E.	..	..	8	N., Cu., Ci-cu.

Date.	Hour.	Barometer.			Therm'rs, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.				Dir. points.	Force, lbs. °			
8	0 15	13.2	759.80	29.846	44.3	43.	.278	3 A. M.: (D. 42.)	91.2	ENE.	..	.25	8	N., raining.
	2 15	12.1	758.75	29.811	43.8	43.	.284	(A. 44.5)	93.2	ENE.	..	.20	8	N., raining.
	4 15	11.6	758.45	29.801	45.	44.2	.297	9 A. M.: (D. 43.)	92.3	NE.	..	.15	8	N., raining.
	6 15	11.1	759.15	29.831	45.	44.	.293	(A. 48.5)	92.	NE.	..	.21	8	N., Ci-cu., raining.
	8 15	11.2	759.60	29.849	47.	45.3	.299	(D. 43.)	88.	NE.	..	..	8	Cu., Ci-cu., N.
	10 15	11.7	760.70	29.890	49.5	46.4	.295	(A. 48.5)	83.7	NE.	..	..	8	Cu., Ci-cu., N.
	12 15	12.1	761.70	29.927	51.5	47.8	.305	3 P. M.: (D. 44.3)	82.	NE.	..	..	8	Cu., Ci-cu., N.
	14 15	12.8	762.40	29.951	54.6	50.	.322	(D. 43.4)	78.6	N.	..	..	8	Cu., Ci-cu., N.
	16 15	13.	763.00	29.973	54.	48.7	.298	9 P. M.: (D. 40.7)	76.	NW.	..	..	8	Cu., Ci-cu., N.
	18 15	14.7	763.75	29.995	56.5	49.5	.289	(A. 49.1)	69.1	NW.	..	..	..	Ci-cu. in Hor.
10	20 15	13.7	764.40	30.026	50.1	46.9	.300	(D. 47.)	79.	NW.	..	..	..	Clear.
	22 15	13.	765.90	30.088	48.4	44.6	.267	3 A. M.: (D. 49.4)	79.5	NW.	..	..	..	Clear.
	0 15	14.8	762.50	29.946	51.5	49.	.333	(D. 47.)	83.	S.	..	..	8	N., raining.
	2 15	14.1	760.40	29.867	49.5	48.	.332	(A. 49.4)	90.	S.	..	.03	8	N., raining.
	4 15	13.7	768.80	29.806	49.	48.3	.344	9 A. M.: (D. 51.3)	93.2	SE. by S.	..	.03	8	N., raining.
	6 15	13.3	757.30	29.748	50.	49.5	.361	(A. 53.)	93.2	E. by S.	..	.03	8	N., raining.
	8 15	13.	755.70	29.687	51.8	51.3	.384	(D. 56.)	93.	E. by S.	..	.03	8	N., raining, (foggy.)
	10 15	13.3	753.60	29.603	54.5	54.	.422	3 P. M.: (D. 56.)	92.2	E. by S.	..	.03	8	N., raining, (foggy.)
	12 15	14.1	752.60	29.561	57.	56.3	.454	(A. 60.6)	92.5	SSW.	..	.03	8	N., raining, (foggy.)
	14 15	14.7	750.40	29.471	60.	58.	.495	(D. 54.)	91.	SW.	..	.30	8	N., ceased raining.
22	16 15	15.	749.00	29.414	61.6	60.1	.509	9 P. M.: (A. 61.9)	90.	SSW.	..	.02	8	N., Ci-cu.
	18 15	15.9	748.20	29.383	62.5	61.5	.539	(D. 54.)	91.	SSW.	..	.02	8	N., light shower.
	20 15	16.	746.65	29.316	62.5	60.5	.521	(D. 54.)	94.2	SW.	..	..	8	N., Ci-cu.
	22 15	16.3	746.70	29.317	60.6	59.4	.500	(A. 61.9)	92.1	NW.	..	..	4	N., Ci-cu.

Day.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Gauges.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
11	m.													
	0	15	746.85	29.323	59.5	55.	.392	3 A. M.: (D. 48.8)	82.2	W. by N.			2	Cu., Ci-s.
	2	15	747.00	29.332	56.5	50.5	.325	(A. 54.5)	79.	W.			2	Cu., Ci-s.
	4	15	747.25	29.345	52.4	48.5	.312	(A. 54.5)	81.	W.			()	Clear.
	6	15	747.85	29.371	53.4	49.5	.324	9 A. M.: (D. 44.)	81.1	SW. by W.			7	Cu., Ci-cu., Ci-s.
	8	15	748.25	29.385	57.8	51.1	.314	(A. 59.)	76.	WNW.			7	Cu., Ci-cu.
	10	15	748.55	29.393	59.5	52.4	.337	3 P. M.: (D. 47.3)	73.	WNW.			5	Cu., Ci-cu.
	12	15	748.40	29.384	62.2	54.7	.355	(A. 63.5)	71.	WNW.			4	Cu., Ci-cu.
	14	15	748.40	29.380	63.3	53.2	.305	(A. 63.5)	67.	WNW.			5	Cu., Ci-cu.
	16	15	749.00	29.391	63.6	53.5	.310	9 P. M.: (D. 44.)	66.5	W.			..	Clear.
	18	15	749.35	29.412	63.5	54.	.323	(A. 56.2)	73.6	W.			..	Clear.
12	0	15	750.25	29.458	57.5	51.4	.325	3 A. M.: (D. 41.8)	79.	WNW.			3	Ci-s.
	2	15	749.95	29.441	51.5	47.8	.305	(A. 50.)	85.2	WNW.			8	Ci., Ci-cu., Cu., Cu-s.
	4	15	749.95	29.453	50.	47.5	.316	(A. 50.)	85.2	W. by S.			8	Ci., Ci-cu., Cu., Cu-s.
	6	15	750.25	29.468	51.5	48.9	.331	9 A. M.: (D. 47.5)	86.	W. by S.			8	Ci., Ci-cu., Cu., Cu-s.
	8	15	750.40	29.474	53.5	51.1	.352	(A. 54.1)	84.	W. by S.		.08	8	Ci-cu., N., raining.
	10	15	750.70	29.484	55.3	51.6	.353	3 P. M.: (D. 46.5)	80.5	NNW.		.02	8	Cu., Ci-cu., N.
	12	15	750.70	29.483	56.	50.2	.323	(A. 56.3)	78.	NW.			8	Cu., Ci-cu., N.
	14	15	750.90	29.489	57.1	51.5	.331	9 P. M.: (D. 45.)	82.2	WNW.			7	Cu., Ci-cu.
	16	15	751.50	29.512	58.1	51.8	.328	(D. 45.)	82.2	WNW.			2	Cu., Ci-cu., and N.
	18	15	752.75	29.560	54.5	50.5	.335	(A. 51.)	85.	W.		.04	7	Scattered Cu.
	20	15	754.40	29.627	51.6	47.9	.306						2	
	22	15	755.00	29.653	49.5	46.7	.302						..	

Day.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temp'ture, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
13	h. m.													
	0 15	13.7	755.05	29.659	49.9	46.	.382	3 A. M.: (D. 42.)	82.2	NW.			3	Cl-cu., Cl-s., N.
	2 15	12.9	755.00	29.661	47.5	44.5	.375	(A. 46.5)	84.1	NW. by W.			4	Cl-s., Cl-cu.
	4 15	12.3	755.40	29.680	45.1	43.	.270	9 A. M.: (D. 42.4)	85.9	NW. by W.			1	Cl-s., Cu-s.
	6 15	12.	755.90	29.700	46.6	44.5	.286	9 A. M.: (D. 42.4)	85.7	W. by S.			7	Cl., Cl-s., Cl-cu.
	8 15	12.8	756.80	29.731	53.5	48.5	.299	(A. 54.5)	79.2	NW.			3	Cl., Cu., Cl-cu.
	10 15	13.9	756.50	29.714	55.8	49.5	.296	9 P. M.: (D. 44.6)	70.7	WNW.			8	Cl., Cu., Cl-cu.
	12 15	15.	756.30	29.700	58.	50.	.283	(A. 62.1)	67.	W.			7	Cu., Cl-cu.
	14 15	15.8	755.60	29.671	60.1	51.2	.289		64.	W.			6	Cu., Cl-cu.
	16 15	16.3	755.40	29.660	61.	51.5	.287		77.3	ENE.			8	Cu., Cl-cu., Cl-s., N.
	18 15	16.5	756.25	29.692	55.5	50.5	.324		83.	W.			8	Cu., Cl-cu., Cl-s., N.
	20 15	15.9	757.40	29.740	50.5	47.	.298		91.	NNE.	.10		8	Cu., Cl-cu., raining.
	22 15	15.	757.15	29.734	48.5	45.8	.293		86.	NW.			8	Cu., Cl-cu., raining.
	14	0 15	14.2	757.00	29.733	46.5	43.5	.265	3 A. M.: (D. 38.4)	88.9	NW. by W.			8	Cl., Cl-cu., N.
2 15		13.1	756.35	29.712	42.	40.1	.244	(A. 42.3)	88.	NW.			5	Cl., Cl-cu., Cu., N.
4 15		12.	756.35	29.717	41.9	39.9	.241	9 A. M.: (D. 43.6)	87.8	NW.			7	Cl., Cl-s., S., Cl-cu., Cu.
6 15		11.9	756.90	29.739	43.	41.	.252	(A. 48.8)	81.	N.	.03		8	Cl-s., Cl-cu., Cu., Cu-s., showers.
8 15		12.	757.50	29.763	45.8	43.6	.275	(D. 43.6)	89.	NW.			8	Cl., Cu., Cl-cu., N., showers.
10 15		12.	758.00	29.782	51.2	46.6	.281	(A. 48.8)	81.	N.			7	Cu., Cl-cu.
12 15		13.2	757.80	29.768	56.	50.	.306	3 P. M.: (D. 44.)	75.5	NW.			4	Cu., Cl-cu.
14 15		14.2	757.70	29.761	58.	50.	.283	(A. 59.2)	70.	NNW.			5	Cu., Cl-cu., N.
16 15		14.8	757.75	29.760	60.	49.	.238	(A. 59.2)	63.	NNW.			3	Cu., Cl-cu.
18 15		15.3	758.40	29.782	58.	47.5	.235	9 P. M.: (D. 36.)	60.	NW.			7	Cu., Cl-cu.
20 15		15.2	760.00	29.845	55.	47.	.247	(D. 36.)	64.5	NNW.			8	Cu., Cl-cu.
22 15		14.7	760.65	29.874	50.3	43.5	.233	(A. 52.)	68.	N.			..	Cl-s.

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

MAR.]

Day.	Hour.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges, &c.	Wind.		Rain, inches.	Sky covered, Bths.	Clouds, &c.
			Temperatures,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
16	0	15	13.7	761.00	29.892	45.5	40.1	.205	3 A. M.: (D. 38.)	72.	N.	..	..	2	Cu.
	2	15	12.6	761.05	29.900	44.7	39.	.191	(D. 38.)	71.	N.	..	..	..	Clear.
	4	15	11.6	761.15	29.907	40.1	37.1	.205	(A. 42.5)	80.7	N.	..	..	..	Clear.
	6	15	11.4	762.20	29.950	44.8	40.4	.219	9 A. M.: (D. 33.)	78.	N.	..	..	..	Clear.
	8	15	12.6	763.00	29.976	51.	43.5	.215	(D. 33.)	70.	NE.	..	..	..	Clear.
	10	15	13.8	763.20	29.977	54.5	46.5	.241	(A. 53.3)	68.5	E.	..	..	..	Clear.
	12	15	15.	763.00	29.963	56.7	47.1	.230	3 P. M.: (D. 48.)	66.	N.	..	..	2	Cu.
	14	15	15.2	762.60	29.947	59.2	48.8	.241	(D. 48.)	64.	W.	..	..	5	Cu., Ci-cu.
	16	15	16.1	763.10	29.923	61.5	52.1	.296	(A. 60.5)	65.	SSE.	..	..	2	Cu., Ci-cu.
	18	15	16.2	762.35	29.933	58.8	51.8	.319	9 P. M.: (D. 36.4)	69.	SSW.	..	..	4	Cu., Ci-cu.
	20	15	15.8	763.30	29.974	50.5	45.	.252	(D. 36.4)	73.	S.	..	..	..	Clear.
	22	15	14.5	763.90	30.002	46.1	42.5	.247	(A. 47.8)	77.3	SSE.	..	..	..	Clear.
17	0	15	14.6	762.70	29.954	49.5	47.1	.311	3 A. M.: (D. 46.2)	85.8	SW.	..	..	..	Clear.
	2	15	13.8	761.55	29.913	50.4	49.1	.347	(D. 46.2)	88.2	SW.	..	..	8	Overcast.
	4	15	13.3	760.70	29.882	51.5	51.	.380	(A. 50.5)	89.2	SW. by W.	..	..	8	Overcast.
	6	15	13.2	759.50	29.834	52.8	49.8	.337	9 A. M.: (D. 45.6)	87.	SW. by W.	..	..	8	Ci-a., Ci., Cu-a.
	8	15	13.8	757.50	29.754	57.5	52.5	.351	(D. 45.6)	81.7	SW. by W.	..	..	7	Light Ci., Ci-cu., Ci-a., S.
	10	15	15.2	755.60	29.674	65.	56.	.357	(A. 61.1)	70.	WSW.	..	..	6	Ci., Ci-cu., S.
	12	15	17.	752.75	29.554	70.2	58.2	.358	3 P. M.: (D. 47.)	65.2	SW.	..	..	8	N., a little rain.
	14	15	17.8	753.50	29.578	65.2	56.	.355	(D. 47.)	69.5	NW.	..	.01	..	Cu., Ci-cu.
	16	15	18.6	753.20	29.563	72.4	58.4	.339	(A. 65.6)	60.	NNW.	..	..	..	Cu., Ci-cu.
	18	15	19.	754.25	29.603	70.	55.	.374	.....	55.8	NNW.	..	..	..	Cu., Ci-cu.
	20	15	18.8	756.00	29.669	62.5	48.	.187	.....	55.2	N.	..	..	3	Cu., Ci-cu.
	22	15	17.6	757.65	29.742	55.6	45.6	.208	.....	62.	N.	..	..	..	Cu., Ci-cu.

Day.	Hour.	Barometer.			Therm'rs, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Gauges, s.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
18	0	15	758.20	29.769	49.5	44.1	.245	3 A. M.: (D. 34.2)	67.2	NNE.	..	..	..	Hazy.
	2	15	758.45	29.784	48.2	42.6	.226	(A. 48.)	69.2	NW.	..	..	..	Clear.
	4	15	758.75	29.800	46.7	40.5	.200	9 A. M.: (D. 34.3)	71.	NNE.	..	..	..	Clear.
	6	15	759.10	29.827	50.5	43.5	.221	(A. 56.2)	69.9	NNW.	..	..	..	Clear.
	8	15	759.30	29.818	54.3	46.5	.244	3 P. M.: (D. 37.4)	68.	NNW.	..	..	..	Clear.
	10	15	758.60	29.790	57.7	48.4	.250	(A. 64.)	65.5	NNW.	..	..	..	Clear.
	12	15	758.00	29.762	60.	45.8	.233	9 P. M.: (D. 37.4)	61.5	NNW.	..	..	..	Clear.
	14	15	757.30	29.734	61.5	47.5	.186	(A. 64.)	59.	NW.	..	..	..	Clear.
	16	15	757.00	29.719	64.	49.	.193	9 P. M.: (D. 37.4)	56.	NNE.	..	..	..	Clear.
	18	15	757.45	29.732	64.3	49.3	.197	(D. 37.6)	55.2	NNE.	..	..	..	Clear.
19	0	15	758.65	29.781	56.	45.	.191	(A. 54.6)	60.3	NNE.	..	..	..	Clear.
	2	15	758.55	29.800	53.9	44.8	.210	3 A. M.: (D. 27.2)	72.8	N. by E.	..	..	..	Clear.
	4	15	757.95	29.766	49.9	44.	.238	(D. 27.2)	74.	SW.	..	..	..	Clear.
	6	15	758.20	29.781	47.5	41.	.201	(A. 48.7)	71.	NNW.	..	..	..	Clear.
	8	15	758.85	29.808	51.5	43.5	.209	9 A. M.: (D. 34.)	69.8	NNW.	..	..	..	Clear.
	10	15	759.75	29.836	56.9	47.1	.235	(A. 57.)	68.5	N.	..	..	..	Clear.
	12	15	760.00	29.842	58.5	48.6	.245	3 P. M.: (D. 37.4)	66.	NNW.	..	..	..	Clear.
	14	15	759.80	29.826	59.3	48.8	.236	(A. 68.6)	64.5	NNW.	..	..	..	Clear.
	16	15	760.30	29.845	60.8	49.3	.251	9 P. M.: (D. 45.)	65.	NNW.	..	..	..	Clear.
	18	15	761.00	29.873	58.9	50.2	.279	(A. 50.6)	68.	N.	..	..	..	Clear.
20	15	17.	761.75	29.914	53.7	47.	.262	(D. 45.)	72.5	N.	Clear.
	22	15	762.25	29.929	50.	45.2	.285	(A. 50.6)	93.3	SW.	Clear.

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DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

Day.	Hour.	Date.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Baunsure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
			Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
20	12	15	14.9	762.40	29.940	46.5	43.9	.274	3 A. M.:	85.2	SW.	..	..	..	Clear.
	0	15	14.	762.50	29.949	44.7	43.2	.278	(D. 39.)	92.8	SW.	..	..	..	Clear.
	2	15	13.2	762.60	29.956	44.	42.1	.268	(A. 45.5)	90.	SW.	..	4	..	Ci., Ci-s.
	4	15	12.5	763.20	29.984	45.5	44.	.287	9 A. M.:	90.3	NW.	..	8	..	Ci., Ci-s.
	6	15	12.5	763.30	30.005	53.2	47.2	.272	(D. 40.)	77.	NW.	..	1	..	Ci., Ci-s.
	8	15	13.3	763.85	30.009	59.6	50.2	.271	(A. 55.6)	68.	N.	..	..	..	Clear.
	10	15	14.8	764.10	30.968	62.6	52.1	.283	3 P. M.:	68.	N.	..	..	..	Clear.
	12	15	16.1	763.75	29.968	65.4	54.	.309	(D. 34.8)	62.3	NE.	..	..	..	Clear.
	14	15	17.2	763.30	29.964	65.4	54.	.325	(A. 66.)	60.2	ESE.	..	7	..	Light Ci.
	16	15	18.3	763.05	29.949	68.5	56.3	.316	9 P. M.:	65.	S.	..	..	..	Clear.
	18	15	19.2	763.16	29.949	65.5	55.8	.342	(D. 46.8)	79.	S.	..	..	..	Clear.
21	20	15	18.9	763.60	29.968	58.	52.4	.341	(A. 55.6)	86.2	S. by W.	..	..	..	Clear.
	22	15	18.	764.00	29.929	54.	50.5	.316	3 A. M.:	92.	S. by W.	..	..	..	Clear.
	0	15	17.	764.30	30.006	51.4	49.5	.340	(D. 47.)	93.	SW. by S.	..	..	..	Clear.
	2	15	15.9	764.05	30.001	50.2	48.7	.338	(A. 50.)	89.2	SW. by S.	..	2	..	Ci., hazy.
	4	15	15.2	763.56	29.988	49.	48.	.384	9 A. M.:	85.	SW. by S.	..	1	..	Light Ci.
	6	15	15.2	764.35	30.016	53.8	52.2	.419	(D. 49.2)	85.	SW.	..	..	..	Clear.
	8	15	16.5	764.65	30.023	59.5	56.	.453	(A. 62.)	79.	SW.	..	..	..	Clear, (hazy.)
	10	15	17.5	764.60	30.015	65.	59.5	.511	3 P. M.:	74.3	SSW.	..	..	..	Clear.
	12	15	19.8	763.85	29.975	72.2	64.2	.478	(D. 54.2)	68.8	SW.	..	..	..	Clear.
	14	15	20.3	763.20	29.946	74.6	64.	.496	(A. 75.5)	67.3	SW.	..	1	..	Light Ci.
	16	15	21.8	763.00	29.931	76.9	65.4	.511	9 P. M.:	70.5	SW.	..	3	..	Light Ci.
	18	15	22.3	762.80	29.921	74.5	65.	.492	(D. 57.5)	81.5	SSW.	..	..	..	Light Ci., Ci-s.
	20	15	22.3	763.40	29.944	66.7	61.5	.489	(A. 64.)	85.2	SSW.	..	2	..	Light Ci., Ci-s. in N.
	22	15	21.7	764.25	29.961	63.	60.					..			

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DAILY METEOROLOGICAL OBSERVATIONS.

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Day.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Saunures's	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.				Dir. points.	Force, lbs.			
22	h. m.													
	0 15	21.	764.10	29.979	61.	59.	.484	3 A. M.: (D. 56.1)	90.7	SW.	..	..	1	Clouds in Hor.
	2 15	20.3	763.65	29.964	57.5	57.	.467	(A. 56.6)	96.	SW.	..	..	1	Ci-s. (?)
	4 15	19.7	763.65	29.967	57.	56.5	.459	(A. 56.6)	93.2	SE.	..	..	3	Ci., Ci-s., Cu., foggy.
	6 15	19.3	764.45	30.000	60.3	59.4	.503	9 A. M.: (D. 57.)	90.1	ESE.	..	..	6	Ci., S., foggy.
	8 15	20.4	764.90	30.014	67.1	64.5	.578	(A. 70.7)	84.	SE.	..	..	1	Ci., Ci-s.
	10 15	21.3	764.80	30.005	74.	68.6	.635	(A. 70.7)	81.	S.	..	..	1	Hazy.
	12 15	24.	764.55	29.982	80.2	72.5	.702	3 P. M.: (D. 65.)	75.	SW.	..	..	1	S., Cu-s.
	14 15	25.3	764.20	29.962	83.	74.5	.745	(A. 83.8)	73.	SW.	..	..	1	Ci., Cu., Cu-s., S.
	16 15	26.5	764.00	29.949	80.5	71.	.645	(A. 83.8)	73.	SW.	..	..	8	Ci., Cu., Cu-s., S.
	18 15	26.	764.00	29.950	77.	69.9	.645	9 P. M.: (D. 63.6)	76.7	SW. by W.	..	..	8	Ci., Cu., Cu-s., S.
	20 15	25.5	765.00	29.991	72.6	67.1	.599	(A. 71.2)	80.	S.	..	..	8	Ci-cu., Ci-s.
24	22 15	25.	765.25	30.004	69.6	66.	.598	(A. 71.2)	86.	S. by W.	..	..	8	Ci-cu., Ci-s.
	0 15	22.4	765.30	30.018	64.	62.	.537	3 A. M.: (D. 57.1)	89.9	S.	..	..	1	Clear.
	2 15	21.	765.10	30.018	61.6	59.6	.494	(D. 57.1)	91.5	S. by W.	..	..	1	Ci s., (and Cu.?)
	4 15	19.7	765.40	30.036	61.1	59.5	.497	(A. 61.5)	93.	SSW.	..	..	4	Ci., Ci s., Cu.
	6 15	20.8	765.90	30.050	66.8	63.7	.556	9 A. M.: (D. 62.2)	88.	SSW.	..	..	6	Ci., Cu.
	8 15	22.3	766.20	30.055	71.	65.2	.556	(D. 62.2)	82.7	SSW.	..	..	3	Ci., Ci-s.
	10 15	23.2	766.00	30.042	74.4	68.4	.623	(A. 72.5)	81.2	SSW.	..	..	..	Clear.
	12 15	25.	765.40	30.010	77.8	69.5	.622	3 P. M.: (D. 63.3)	77.2	SW.	..	..	..	Clear.
	14 15	26.	764.70	29.978	81.2	72.8	.702	(D. 63.3)	76.	SW.	..	..	4	Cu, S.
	16 15	27.	763.80	29.938	82.	71.5	.645	(A. 81.6)	74.1	SSW.	..	..	..	Ci-cu.
	18 15	..	..	..	..	..	..	9 P. M.: (D. 62.5)	..	..	..	..	..	Ci-cu.
	20 15	26.2	765.00	29.989	72.4	66.5	.582	(D. 62.5)	82.2	S. by W.	..	..	1	Ci-cu.
	22 15	25.2	766.00	30.033	69.3	65.4	.581	(A. 69.)	86.8	S. by W.	..	..	..	Ci-cu.

Date.	Hour.	Barometer.			Therm'm, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, eighths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. point.	Force, lbs.			
25	a. m.													
	0 15	24.6	765.25	30.006	66.5	63.2	.545	3 A. M.: (D. 59.3)	88.2	S.	..	..	1	Cl-cu.
	2 15	24.	764.60	29.984	64.	62.	.537	(A. 63.6)	90.5	S.	..	..	1	Cl., Cl-cu.
	4 15	23.8	764.25	29.976	62.3	61.	.526	9 A. M.: (D. 65.)	91.	SSW.	..	..	1	Cl., Cl-cu., S.
	6 15	23.2	764.90	30.004	66.5	64.5	.585	(A. 65.)	86.3	SW. by S.	..	..	..	..
	8 15	24.	765.10	30.003	72.	68.	.636	(D. 65.)	81.5	SW.	..	..	3	Cl., Cl-cu., S., Cl-s.
	10 15	24.8	765.00	29.996	76.	69.8	.653	(A. 74.)	79.	SW. by W.	..	..	6	Cl., Cl-cu., Cu.
	12 15	26.	764.55	29.972	78.	70.5	.655	.....	74.	SW. by S.	..	..	7	Cl., Cl-cu., Cu.
	14 15	26.6	763.40	29.923	81.5	71.2	.641	.....	76.	SW.	..	..	8	Cl., Cl-cu., Cu.
	16 15	26.9	763.10	29.910	78.4	69.5	.617	9 P. M.: (D. 62.)	90.	WSW.	..	..	8	N., raining.
	18 15	26.3	763.55	29.931	66.5	65.5	.615	(A. 66.)	92.2	S.	..	.55	8	N., ceased raining.
	20 15	25.2	763.15	29.920	66.4	65.	.601	(A. 66.)	91.	SSE.	..	..	8	N., Cu., Cl-cu., Cu-s.
26	22 15	24.2	763.10	29.923	66.	64.5	.590	3 A. M.: (D. 60.)	90.5	S.	..	..	7	N., Cu.
	0 15	23.7	762.60	29.907	65.	63.	.566	(A. 65.7)	90.8	S.	..	..	4	N., Cu.
	2 15	23.	761.55	29.869	65.5	63.2	.556	.....	90.7	S.	..	..	6	N., Cu., Cl-cu., Cl.
	4 15	22.	761.30	29.864	65.5	64.	.580	.....	87.5	SW.	..	..	..	..
	6 15	23.5	762.10	29.892	68.	65.	.583	.....	85.	WSW.	..	..	8	N., Cu., Cl-cu.
	8 15	23.	762.70	29.914	69.8	65.8	.589	.....	87.	W. by N.	..	..	8	N., rain.
	10 15	23.	763.20	29.933	66.7	63.5	.552	.....	87.	SW. by W.	..	.07	8	N., rain.
	12 15	22.6	763.30	29.935	65.5	62.5	.534	3 P. M.: (D. 62.5)	86.6	SW.	..	.03	8	Cu., Cl-cu., N.
	14 15	23.8	763.00	29.926	70.	66.7	.616	(A. 69.8)	87.	SSW.	..	..	8	Cu., Cl-cu., N.
	16 15	23.1	763.40	29.902	69.5	66.	.599	9 P. M.: (D. 61.)	88.5	SSW.	..	..	8	Cu., Cl-cu., Cl-s., N.
	18 15	22.8	762.30	29.899	67.7	65.	.587	(A. 65.5)	90.	SSW.	..	..	8	Cu., Cl-cu., Cl-s., N.
	20 15	23.3	762.65	29.915	66.	63.7	.565	91.2	S. by W.	8	Cu., Cl-cu., Cl-s., N.
	22 15	22.1	763.00	29.930	65.	63.5	.571

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DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Date.		Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
27	h. m.													
	0 15	21.6	762.95	29.930	64.9	62.	.527	3 1/4 A. M.: (D. 60.)	91.	S. by W.			7	Cu., Ci-cu., N.
	2 15	21.3	762.65	29.920	64.	62.8	.561	(A. 63.8)	91.5	S. by W.			7	Cu., Ci-cu., N.
	4 15	20.8	762.75	29.928	63.2	62.5	.560	9 A. M.: (D. 62.8)	93.	S. by W.			8	Ci-cu., Ci s., Ci.
	6 15	20.7	763.50	29.956	63.7	62.5	.555	9 A. M.: (D. 62.8)	94.	S. by W.			8	Ci-cu., Ci., N.
	8 15	20.7	764.05	29.978	66.1	64.5	.589	(A. 67.3)	91.3	S.			8	N., Ci-cu., rain.
	10 15	21.	764.40	29.991	68.6	65.6	.596	(A. 67.3)	88.	S. by E.			8	N., Ci-cu., rain.
	12 15	21.	764.25	29.985	68.2	65.2	.587	3 P. M.: (D. 63.)	88.5	ESE.			8	N., Ci cu., Cu., Cu-s., rain.
	14 15	21.6	764.25	29.981	68.5	66.5	.626	(D. 63.)	90.5	E. by N.			8	N., Ci-cu., Cu., Cu-s., rain.
	16 15	21.7	764.35	29.985	68.8	67.	.639	(A. 66.6)	91.5	S. by E.			8	N., ceased rain.
28	18 15	21.9	764.25	29.980	67.5	65.	.589	9 P. M.: (D. 61.5)	90.	ESE.			8	N., Cu., Ci-cu.
	20 15	21.8	764.50	29.991	65.	63.9	.581	(D. 61.5)	93.5	ESE.			8	N., light rain.
	22 15	21.1	764.65	30.000	64.	63.	.567	(A. 61.3)	94.2	ESE.			8	N., light rain.
	0 15	21.	764.40	29.991	63.5	62.7	.563	3 A. M.: (D. 60.2)	93.9	SE. by S.			8	N., Cu.
	2 15	20.9	764.55	29.997	63.3	62.5	.559	(D. 60.2)	93.8	SSE.			8	N., light rain.
	4 15	20.8	764.60	29.999	63.6	63.	.571	(A. 63.2)	93.4	SSE.			8	N.
	6 15	20.5	765.35	30.029	64.5	63.8	.585	9 A. M.: (D. 64.)	93.4	SSE.			8	Ci., Cu., N.
	8 15	21.	765.75	30.044	69.7	67.5	.645	(D. 64.)	89.	SSE.			8	Ci-cu., N.
	10 15	21.9	766.00	30.049	72.4	69.4	.679	(A. 70.)	87.	SSE.			8	Ci cu., N.
	12 15	23.2	765.30	30.014	74.2	68.5	.628	3 P. M.: (D. 66.5)	81.	WSW.			3	Cu., Ci-cu., Cu-s.
29	14 15	24.5	765.00	29.997	77.2	70.2	.664	(D. 66.5)	79.	WSW.			6	Cu., Ci-cu.
	16 15	25.5	765.50	30.017	77.3	72.	.716	(A. 78.8)	79.2	SSW.			6	Cu., Ci-cu., rain at 17h. 20m.
	18 15	25.3	764.50	29.974	74.6	70.	.676	9 P. M.: (D. 64.)	84.	SSW.	.21		7	Cu., Ci-cu., Ci s., Cu-s.
	20 15	24.7	764.90	29.993	68.5	65.6	.598	(D. 64.)	85.5	SW. by S.			1	Ci-cu., Ci-s.
30	22 15	24.	764.85	29.994	66.2	64.5	.588	(A. 67.1)	92.	S. by W.			1	Ci-s.

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DAILY METEOROLOGICAL OBSERVATIONS.

May.]

Date.	Hour.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hyg., Sausure's.	Wind.		Rain, inches.	Sky covered, 8ths.	Clouds, &c.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
29	h. m.													
	0 15	23.8	764.70	29.988	64.7	63.5	.575	.....	92.4	S. by W.	..	..	1	Cl-s.
	2 15	23.1	764.25	29.975	64.5	63.6	.580	.....	92.5	S. by W.	..	..	8	N.
	4 15	22.8	764.00	29.966	65.	64.	.586	.....	92.5	SSW.	..	..	8	N.
	6 15	22.6	764.45	29.985	65.2	64.5	.599	.....	93.	SSW.	..	..	8	N.
	8 15	22.	764.50	29.990	69.	66.6	.624	.....	83.6	SSW.	..	..	8	N., Cu.
	10 15	23.	761.35	29.979	73.2	69.2	.663	.....	85.5	SSE.	..	..	8	Cu., Ci-cu., N.
	12 15	23.8	763.50	29.940	73.4	70.5	.707	.....	83.5	S. by W.	..	..	6	Cl-s., Cu-s.
	14 15	24.5	762.60	29.903	75.1	68.8	.628	.....	79.5	SW.	..	..	7	Cl-s., with Cl. and Cu.
	16 15	26.	762.00	29.871	77.9	71.5	.691	.....	78.1	S. by W.	..	..	8	Cl-s., with Cl. and Cu.
	18 15	26.5	761.95	29.869	77.	69.5	.631	9 P. M.:	77.	SSW.	..	..	4	Cl-s., with Cl. and Cu.
	20 15	24.7	762.30	29.890	69.1	65.6	.591	(D. 64.)	83.2	S.	..	.01	8	Cl-s., with Cl. and Cu.
31	22 15	23.4	761.50	29.865	67.5	65.	.589	(A. 68.2)	90.	W.	..	..	7	Cu-s., N., rain.
	0 15	18.2	765.40	30.042	50.	....	....	3 A. M.:	84.	ENE.	..	..	..	Clear.
	2 15	17.3	764.75	30.022	48.	46.5	.314	(D. 46.5)	85.	NE. by N.	..	..	..	Clear.
	4 15	16.4	764.65	30.023	46.7	45.2	.300	(A. 47.5)	88.	NE.	..	..	..	Clear.
	6 15	16.	764.70	30.026	51.	49.	.339	9 A. M.:	85.5	N.	..	..	..	Clear.
	8 15	17.	765.00	30.033	58.8	51.8	.319	(D. 44.)	70.	ENE.	..	..	..	Clear.
	10 15	18.2	764.55	30.009	62.1	53.6	.327	(A. 60.5)	69.	ENE.	..	..	..	Clear.
	12 15	19.2	763.40	29.969	65.2	56.4	.365	.....	68.3	ENE.	..	..	4	Cl., Ci-s.
	14 15	20.2	762.80	29.931	67.5	56.2	.334	.....	63.5	ENE.	..	..	..	Clear.
	16 15	21.	762.00	29.896	69.7	56.7	.328	.....	60.	E. by S.	..	..	..	Clear.
	18 15	21.3	761.60	29.879	68.	57.	.350	.....	61.	NE.	..	..	..	Clear.
	20 15	21.2	761.85	29.890	59.	54.1	.374	.....	71.3	ESE.	..	..	..	Clear.
	22 15	19.8	762.00	29.902	53.8	50.4	.341	.....	84.	SE.	..	..	..	Clear.

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

JUNE.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygt., Gauss's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
3	0	15	24.8	758.45	29.739	70.	63.7	...	520	3 A. M.: (D. 52.2)	69.5	196	...	.6	...	...	225	...
	2	15	23.7	758.75	29.756	64.7	61.5	...	501	(A. 63.2)	74.	192	...	.1	...	...	225	...
	4	15	...	...	...	62.	60.	...	436	...	73.5	177	...	...	...	...	...	...
	6	15	20.3	760.70	29.849	62.5	58.	...	361	...	72.5	173	...	...	...	...	...	...
	8	15	21.8	761.60	29.877	69.	57.8	...	337	...	69.	190	...	...	...	...	...	...
	10	15	22.5	761.70	29.877	70.6	57.6	...	310	...	64.2	180	...	...	...	...	...	...
	12	15	22.9	761.50	29.868	71.8	57.1	...	289	...	61.3	160	...	...	...	...	...	...
	14	15	23.6	761.00	29.844	74.6	57.5	...	232	...	57.	180	...	...	...	...	...	...
	16	15	24.5	760.50	29.821	76.8	58.1	...	404	...	55.	150	...	...	...	...	...	...
	18	15	24.8	760.30	29.812	75.8	62.	...	347	9 P. M.: (D. 46.)	57.	165	...	...	...	...	...	...
	20	15	24.	760.90	29.839	67.	56.5	...	277	(A. 62.5)	65.	160	...	...	...	...	...	...
4	22	15	23.	761.60	29.871	62.	51.6	...	311	...	64.5	180	...	...	...	...	...	...
	0	15	21.7	762.10	29.896	55.5	50.	44.5	273	3 A. M.: (D. 39.)	73.	66	...	...	Some light Ci-s.	...	...	...
	2	15	21.1	762.25	29.905	51.7	46.5	42.	327	(A. 51.7)	78.	182	...	...	...	...	135	...
	4	15	18.1	762.60	29.934	50.	48.4	41.7	316	...	80.5	147	...	...	...	...	135	...
	6	15	18.2	763.05	29.949	51.8	48.4	...	321	...	78.5	182	...	...	...	...	...	...
	8	15	18.9	763.40	29.960	53.1	53.8	...	378	...	71.	170	...	...	...	...	...	...
	10	15	20.3	763.30	29.950	68.5	58.2	...	378	...	70.	10	...	...	...	...	...	...
	12	15	21.7	763.35	29.906	72.3	61.6	...	432	3 P. M.: (D. 56.)	68.7	55	...	...	...	...	...	...
	14	15	22.9	761.25	29.858	75.4	62.7	...	430	...	65.6	66	...	...	...	...	...	...
	16	15	24.7	760.95	29.838	77.9	65.	...	472	(A. 77.5)	66.5	50	...	...	...	...	...	...
	18	15	25.	760.45	29.816	74.5	65.3	...	520	...	72.5	50	...	...	...	...	...	...
	20	15	24.6	760.35	29.814	69.5	63.6	...	521	...	80.	50	...	...	...	...	...	...
	22	15	23.9	760.35	29.817	65.5	61.5	...	505	...	87.3	45	...	...	...	...	...	...

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Day.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Saunures s.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
5	h. m.																	
	0 15	22.9	759.75	29.799	64.	61.5	...	.522	...	90.	56.	..	..	..	Clear.	..	..	..
	2 15	22.4	759.55	29.792	63.6	61.4	...	.525	...	90.8	51.	..	..	..	Clear.	..	..	..
	4 15	21.9	759.40	29.789	61.	57.5	...	.442	...	91.	58.	..	..	.1	Clear.	..	..	..
	6 15	21.9	759.45	29.791	65.	62.	...	.525	...	88.	60.	..	..	..	Clear.	..	..	..
	8 15	23.2	759.40	29.782	77.3	65.8	...	.505	...	65.3	104.	..	..	..	Clear.	..	..	..
	10 15	24.8	759.00	29.760	81.8	67.2	...	.503	...	62.	140.	..	..	..	Clear.	..	..	..
	12 15	27.	758.60	29.734	85.7	69.6	...	.541	...	61.5	135.	..	..	..	Clear, hazy.	..	..	..
	14 15	28.2	758.30	29.715	88.5	69.8	...	.516	...	59.	140.	..	..	..	Clear, hazy.	..	..	..
	16 15	29.3	758.30	29.711	89.	72.	...	.588	...	61.	130.	..	..	..	Clear, hazy.	..	..	..
7	18 15	29.	758.40	29.716	85.1	74.5	...	.723	...	67.	100.	..	..	1.0	Cu., Ci-cu.	..	..	..
	20 15	28.3	759.50	29.762	80.	70.	...	.617	(D. 65.)	69.	238.	..	..	1.0	Ci-cu., Cu-s.	..	..	..
	22 15	27.9	760.10	29.789	79.	68.5	...	.576	(A. 79.5)	69.	185.	..	..	1.0	Ci-cu., Cu-s, S.	..	..	..
	0 15	22.9	764.40	29.982	60.	...	...	...	3 A. M.: 32	90.5	352.	..	..	..	Clear.	..	..	..
	2 15	22.	762.60	29.915	60.	58.5	...	.482	(D. 52.5)	92.5	46.	..	..	..	Clear.	..	..	..
	4 15	21.	763.00	29.934	59.	57.5	...	.465	(A. 59.5)	92.8	46.	..	..	..	Clear.	..	..	..
	6 15	20.8	763.20	29.943	63.	61.4	...	.530	9 A. M.: 46	92.	46.	..	..	1.0	N., Cu.	..	..	..
	8 15	21.2	763.10	29.938	67.8	65.6	...	.606	(D. 62.)	89.5	40.	..	..	1.0	Ci., Ci cu., Ci-s, S.	45	90	..
	10 15	22.5	762.85	29.922	74.	70.6	...	.704	(A. 68.3)	86.	40.	..	..	..	Ci cu., Ci-s.	..	..	..
	12 15	25.2	762.30	29.887	78.9	71.9	...	.696	3 P. M.: 36	80.5	36.	..	..	..	Cu., Ci-cu., Ci-s.	..	..	..
14 15	26.1	761.10	29.836	82.8	74.9	74.9	...	.764	(D. 67.3)	77.5	40.	..	..	..	Ci-cu., Ci-s.	..	135	..
16 15	28.2	760.75	29.812	84.3	75.5	75.5	...	.771	(A. 82.7)	76.	50.	..	..	.05	Hazy, Cu s. in N.	..	..	..
18 15	28.	761.50	29.843	89.4	69.	69.	...	.700	9 P. M.: 91	91.	180.	..	..	1.0	N., Cu-s, rain.	180	180	..
20 15	26.5	760.75	29.822	71.5	69.5	69.5	...	.693	(D. 66.8)	86.6	110.	..	..	.22	Ci-cu., Ci-s, Cu-s.	..	135	..
22 15	26.2	760.60	29.817	71.7	70.5	70.5	...	.726	(A. 72.)	91.	56.	..	..	1.0	Ci-cu., Ci-s.	..	..	..

JUNE.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Date.		Barometer.				Thermometers, Fah.			Force of vapor, lbs.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.	Dir., degrees.				Force, lbs.	1.				2.	3.	
8	4.	26.	760.75	29.828	71.5	70.5	71.3	.728	3 A. M.: (D. 63.)	91.9	38	..	..	1.0	Cu., Ci-cu.	..	..	..	..
	0 15	25.7	761.80	29.865	70.5	69.5	69.	.704	(A. 70.4)	98.4	54	..	..	..	Clear	..	..	..	..
	2 15	25.	760.70	29.826	70.	69.2	68.	.699	(A. 70.4)	91.	57	..	..	.2	Ci-cu., Cu.	..	..	..	..
	4 15	25.4	761.00	29.836	72.7	71.2	72.	.740	9 A. M.: (D. 67.7)	98.8	57	..	..	.05	Ci.	..	..	..	..
	6 15	26.4	761.70	29.856	81.	78.5	...	.731	(D. 67.7)	77.3	180	..	..	..	Clear	..	..	..	..
	8 15	27.	762.00	29.868	88.6	75.4	...	.775	(A. 81.6)	76.	126	..	..	..	Clear	..	..	..	..
	10 15	27.7	762.00	29.868	83.	75.4	...	...	.780	3 P. M.: (D. 72.5)	71.	74	..	.06	Ci-s., Cu. in Hor.	..	..	..	..
	12 15	28.9	761.60	29.842	87.	76.5	...	...	.675	(A. 90.8)	64.6	100	..	.1	Cu., Cu-s.	..	..	..	..
	14 15	29.8	760.75	29.806	89.5	74.5	...	...	...	9 P. M.: (D. 66.)	70.	30	..	..	Ci., Cu., Ci-s., Cu-s.	..	..	..	..
	16 15	30.9	760.25	29.780	90.2	78.2	...	...	...	(D. 66.)	85.8	135	..	1.0	Ci-cu., Cu-s., Cu.	..	..	..	..
	18 15	30.7	762.35	29.863	73.9	...	...	...	.647	(D. 66.)	85.8	135	..	1.0	N., (?) Cu., Ci-cu., Cu-s.	..	..	..	..
	20 15	28.2	761.45	29.839	72.5	68.5	...	...	.631	3 A. M.: (D. 66.8)	79.	125	..	1.0	Ci-cu., Cu-s.	..	..	..	..
9	22 15	26.9	760.95	29.827	72.4	67.7	...	.580	(D. 67.5)	85.	82	..	.9	Ci., Ci-cu., Ci-s.	..	..	..	..	..
	0 15	26.8	760.80	29.822	73.2	66.7	...	.642	(A. 69.9)	90.2	37	..	.7	Ci., Ci-s., Ci-cu.	..	..	..	..	..
	2 15	26.2	760.55	29.815	70.	67.5	...	.634	9 A. M.: (D. 67.6)	81.5	66	..	.2	Ci-s., Ci-cu., Ci.	..	..	..	..	..
	4 15	25.8	760.90	29.890	68.7	66.8	...	.652	(D. 67.5)	82.	70	..	..	..	Clear	..	..	..	..
	6 15	25.8	761.45	29.851	72.1	68.5	...	.703	(A. 80.6)	75.5	125	..	..	..	Clear	..	..	..	..
	8 15	26.3	761.10	29.835	77.8	71.6	...	.748	...	73.2	126	..	..	..	Cu., Ci cu., Ci-s.	..	..	..	..
	10 15	27.9	761.25	29.834	83.2	74.6	...	...	...	70.	134	..	..	.2	Cu., Ci cu., Ci s.	..	..	..	..
	12 15	29.6	760.85	29.810	86.2	75.9	...	.766	...	67.	155	..	..	.5	Ci-s., Ci-cu., S.	..	..	..	..
	14 15	30.5	760.20	29.779	88.7	76.4	...	.718	...	68.	175	..	..	..	Clear	..	..	..	..
	16 15	31.2	760.20	29.777	87.5	72.5	...	.633	9 P. M.: (D. 60.5)	72.	165	..	..	..	Clear	..	..	..	..
	18 15	30.8	760.50	29.790	85.	71.7	...	.621	(A. 75.)	73.5	170	..	..	..	Clear	..	..	..	..
	20 15	29.9	761.15	29.819	79.	69.6	...	.621	...	...	...	...	..	..	..	..	..	..	..
22 15	28.6	761.95	29.858	75.4	65.4	...	.613	...	...	...	...	..	..	..	..	..	..	..

1841.

DAILY METEOROLOGICAL OBSERVATIONS.

JUNE.]

Day.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
10	h. m.																	
	0 15	28.5	762.30	29.871	71.5	67.5	67.6	.609	3 A. M.: (D. 56.)	74.3	167	..	..	..	Clear	..	..	..
	2 15	26.8	761.75	29.858	67.6	67.2	67.2	.660	(A. 67.5)	78.1	165	..	..	..	Clear	..	..	..
	4 15	26.	762.05	29.873	66.6	61.3	66.	.487	(A. 67.5)	79.1	166	..	..	..	S., Cu.	..	..	..
	6 15	25.2	762.75	29.905	67.5	62.	..	.497	9 A. M.: (D. 59.8)	80.8	177	..	..	..	Cu., Ci.	..	..	..
	8 15	26.	762.70	29.899	74.4	66.8	..	.570	(A. 76.4)	73.	180	..	..	..	Ci., Ci-a.	..	..	..
	10 15	26.5	762.90	29.906	78.2	68.	105.5	.567	(A. 76.4)	73.	240	..	..	..	Ci., Ci-a.	..	..	180
	12 15	27.5	762.40	29.880	80.9	70.7	108.	.630	3 P. M.: (D. 63.2)	72.3	200	..	..	..	Ci., Cu., Ci-a.	0	180	180
	14 15	28.2	761.70	29.849	82.2	67.7	115.2	.512	(A. 82.4)	65.1	100	..	..	..	Ci., Cu., Ci-cu.	..	..	..
	16 15	29.	761.20	29.826	84.	68.9	..	.532	(A. 82.4)	67.3	80	..	..	..	Clear	..	..	..
	18 15	29.6	760.90	29.809	83.5	71.5	..	.631	9 P. M.: (D. 59.8)	76.	72	..	..	..	Clear	..	..	..
	20 15	27.7	760.55	29.807	74.5	67.	..	.575	(A. 72.5)	80.5	72	..	..	..	Clear	..	..	..
	22 15	26.5	760.40	29.808	70.9	65.3	65.5	.560	(A. 72.5)	87.8	40	..	..	..	Clear	..	..	..
11	0 15	25.5	760.75	29.825	67.5	65.7	66.	.612	3 A. M.: (D. 64.)	86.5	58	..	..	..	S., Ci-a., hazy.	..	..	..
	2 15	25.3	759.00	29.757	68.2	67.3	67.	.656	(A. 68.9)	87.	57	..	..	..	S., Ci., Cu.	..	..	..
	4 15	24.8	759.65	29.786	66.	63.2	65.2	.551	(A. 68.9)	87.	52	..	..	..	Ci., S.	..	..	..
	6 15	24.5	759.00	29.761	69.	63.7	..	.532	9 A. M.: (D. 57.7)	79.8	82	..	..	..	Clear	..	..	..
	8 15	25.2	758.25	29.728	76.	68.	112.5	.593	(A. 77.5)	74.	90	..	..	..	Ci-a.	..	..	..
	10 15	26.9	757.80	29.703	81.1	68.1	120.	.540	(A. 77.5)	65.8	95	..	..	..	Ci-a., Ci-cu.	..	..	..
	12 15	28.7	756.55	29.645	84.8	70.7	117.6	.589	3 P. M.: (D. 62.)	63.5	45	..	..	..	Ci., Ci-a., Cu-a.	..	..	..
	14 15	29.	755.50	29.605	86.5	70.8	106.5	.573	(A. 88.3)	64.	87	..	..	..	Ci., Ci-cu., Cu-a., Cu-a.	..	..	..
	16 15	31.	755.00	29.574	88.5	74.2	98.	.674	(A. 88.3)	64.	87	..	..	..	Cu., Ci-cu., Cu-a., rain	..	..	..
	18 15	30.5	755.75	29.607	81.	68.8	..	.585	9 P. M.: (D. 64.5)	81.	340	..	..	..	Ci., Ci-cu.	..	..	..
	20 15	27.7	754.80	29.583	73.5	68.5	..	.527	(A. 72.5)	79.7	200	..	..	..	Cu., Ci-cu.	..	..	..
	22 15	27.4	754.85	29.587	74.5	67.5	..	.593	(A. 72.5)	79.7	200	..	..	..	Cu., Ci-cu.	..	..	..

Day.	Hour.	Barometer.			Thermometers, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.			
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Radiation.	Dir., degrees.				Force, lbs.	1.	2.	3.
14	12	0	15	26.5	755.25	29.607	70.	66.2	...	...	87.	174	...	...	...	...	...	...
	2	15	26.4	754.75	29.688	67.3	65.	...	...	85.	138	...	...	...	...	...	...
	4	15	25.9	755.00	29.600	66.7	64.7	...	...	86.5	169	...	...	...	...	...	...
	6	15	25.3	756.40	29.655	69.2	64.7	...	...	83.5	181	...	...	...	...	...	...
	8	15	25.	757.20	29.688	70.2	61.4	...	...	73.	200	...	...	...	...	...	...
	10	15	25.3	757.80	29.711	70.3	59.6	...	...	68.3	200	...	...	...	...	...	...
	12	15	25.7	758.20	29.724	72.2	61.	...	...	66.5	220	...	...	...	...	...	...
	14	15	25.9	758.35	29.729	73.2	61.8	...	...	66.5	177	...	...	...	...	...	...
	16	15	25.5	758.20	29.724	71.4	60.7	...	...	68.5	250	...	...	...	...	...	...
	18	15	25.	757.90	29.716	68.8	61.8	...	...	73.	240	...	...	...	...	...	...
	20	15	24.7	758.50	29.741	66.9	60.1	...	...	75.	340	...	...	...	...	...	...
	22	15	24.	758.40	29.740	64.	57.	...	...	74.	330	...	...	...	...	...	...
	14	0	15	21.7	757.10	29.700	62.5	61.6	...	...	76.5	227	...	...	...	...	...	...
		2	15	21.3	757.20	29.706	62.3	61.	...	...	78.	185	...	...	...	...	...	...
		4	15	21.2	757.25	29.709	61.5	60.5	...	...	89.	221	...	...	...	...	...	...
		6	15	21.	758.40	29.754	62.8	61.2	...	...	89.5	292	...	...	...	...	...	...
		8	15	20.5	757.40	29.717	64.1	61.6	...	...	86.7	260	...	...	...	...	...	...
		10	15	21.4	757.60	29.718	69.4	65.6	...	...	82.5	300	...	...	...	...	...	...
		12	15	22.8	756.85	29.685	73.3	68.5	...	...	78.6	171	...	...	...	...	...	...
		14	15	24.	756.15	29.651	75.4	69.	...	...	76.3	170	...	...	...	...	...	...
		16	15	25.	755.20	29.611	76.4	70.8	...	...	80.2	290	...	...	...	...	...	...
		18	15	24.2	756.25	29.654	70.5	67.5	...	...	86.2	10	...	...	...	...	...	...
		20	15	23.3	756.50	29.668	67.	65.4	...	...	91.7	5	...	...	...	...	...	...
		22	15	23.2	756.00	29.648	67.	65.4	92.2	17

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygt., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
15	h. m.																	
	0 15	22.5	755.75	29.643	66.9	65.7	...	.619	3 A. M.: (D. 58.3)	94.	266	...	...	1.0	N., Cu., light rain.	...	...	...
	2 15	22.5	755.20	29.623	64.7	68.5	...	.575	(A. 65.5)	93.5	283	...	...	.9	Cl., Ci-cu., Ci-s., N.	...	...	...
	4 15	22.3	755.00	29.616	65.5	64.3	...	.590	(A. 65.5)	93.5	302	...	...	1.0	Cu., N., fine rain.	...	...	...
	6 15	21.8	756.10	29.660	65.7	64.6	...	.597	9 A. M.: (D. 59.8)	94.	37	...	.03	1.0	Cu., N., fine rain.	...	...	...
	8 15	22.	756.65	29.681	65.9	63.6	...	.564	(A. 68.5)	89.5	200	...	.03	1.0	Ci-cu., Ci-s., N.	180	180	...
	10 15	22.5	757.00	29.692	68.5	63.1	...	.521	(A. 68.5)	81.	200	...	...	1.0	Cu., Ci-cu., Cu-s.	180	180	...
	12 15	23.	757.30	29.702	70.8	63.2	...	.498	3 P. M.: (D. 50.7)	75.	180	...	...	.9	Cu., Cl., Ci-cu.	180	90	0
	14 15	23.8	757.30	29.697	72.8	63.4	...	.492	(A. 73.1)	70.5	180	...	...	.7	Cu., Ci., Ci-s.	...	135	45
	16 15	24.2	757.55	29.706	73.5	61.2	...	.406	(A. 73.1)	65.8	180	...	...	.7	Cl., Ci-cu., Ci-s.	135	90	90
	18 15	24.	758.10	29.728	73.	60.5	...	.450	9 P. M.: (D. 62.5)	66.5	180	...	...	...	Clear.	0	135	0
	20 15	22.7	759.50	29.789	65.3	59.5	...	.400	(A. 61.7)	72.6	158	...	...	...	Clear.	...	...	...
	22 15	22.3	760.95	29.849	60.9	55.9	...	.391	(A. 61.7)	79.8	158	...	...	.05	Cl.	...	...	...
16	0 15	21.2	760.70	29.836	59.8	54.7	...	.365	...	78.	154	...	...	.05	Cl.	...	...	...
	2 15	20.8	760.45	29.836	58.7	53.6	...	.365	...	78.3	152	...	...	.6	S.	...	...	...
	4 15	20.	760.50	29.842	56.3	51.5	...	.339	...	79.8	175	...	...	...	S., Ci-cu.	...	...	...
	6 15	19.7	761.50	29.863	58.	52.5	...	.345	9 A. M.: (D. 50.)	78.8	176	...	...	.6	S., Ci-cu.	...	...	...
	8 15	19.8	762.75	29.932	63.8	57.	...	.397	(D. 50.)	78.3	180	...	...	...	Clear.	...	...	...
	10 15	20.9	762.60	29.920	68.	61.6	106.2	.480	(A. 66.5)	72.3	175	...	...	...	Clear.	...	...	...
	12 15	21.8	762.35	29.906	70.8	...	112.1	...	3 P. M.: (D. 45.)	67.5	215	...	...	.2	Cu., Cl.	22	135	...
	14 15	22.7	761.80	29.880	72.5	...	118.9	...	(D. 45.)	65.5	120	...	...	.5	Cu., Cl.	...	180	90
	16 15	23.8	762.25	29.891	75.5	...	118.2	...	(A. 73.7)	63.	117	...	...	.8	Cu., Cl-s.	...	...	...
	18 15	24.6	763.00	29.917	75.5	65.	...	.499	9 P. M.: (D. 53.3)	63.9	206	...	...	.6	Cu., Cl cu.	...	...	...
	20 15	24.2	763.15	29.925	66.5	60.1	...	.453	(D. 53.3)	74.	206	...	...	...	Clear.	...	...	...
	22 15	22.2	763.60	29.952	61.5	58.5	60.5	.464	(A. 64.5)	87.	15	...	...	...	Clear.	...	...	...

Jan.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
17	A. M.																	
	0 15	21.4	763.75	29.963	59.1	57.3	...	.458	3 A. M.: (D. 50.6)	93.	19	...	...	2	Cu., Ci.	...	...	...
	2 15	21.	763.60	29.956	57.3	56.2	...	.449	(A. 57.1)	91.8	20	...	...	.4	Cu., Ci.	...	...	...
	4 15	20.7	764.05	29.978	57.	56.1	...	.449	(A. 57.1)	94.	97	...	...	.3	Cu-s, Cu., S., Ci.	...	...	...
	6 15	20.2	765.00	30.017	60.	57.5	...	.453	9 A. M.: (D. 58.)	87.5	230	...	...	.9	S., Ci., Ci-s.	...	...	...
	8 15	21.2	765.40	30.029	68.4	63.7	...	.538	(A. 70.8)	79.3	282	...	...	.4	Light Ci., Ci-cu., Ci-s.	...	90	90
	10 15	22.7	765.60	30.029	73.6	62.7	...	.450	(A. 70.8)	67.5	273	...	...	.8	Ci., Cu., Ci-cu., Ci-s.	45	90	90
	12 15	23.6	764.80	29.994	76.5	65.8	...	.514	3 P. M.: (D. 56.)	68.	65	...	...	.4	Ci., Cu., Ci-cu., Ci-s.	270	112	112
	14 15	24.6	764.20	29.965	78.5	67.	...	.530	(A. 74.5)	66.	30	...	...	.7	Ci., Cu., Ci-cu.	315	90	90
	16 15	25.1	764.25	29.965	75.3	65.7	...	.524	(A. 74.5)	69.	19	...	...	.6	Cu., Ci-cu., Ci.	...	...	...
	18 15	24.9	764.40	29.971	72.7	63.7	...	.490	9 P. M.: (D. 52.3)	70.9	350	...	...	.8	Cu., Ci-cu., Ci.	135	...	...
	20 15	23.7	765.00	30.001	67.4	59.5	...	.436	(A. 65.5)	73.1	345	...	...	.9	Cu., Ci-cu., Cu-s.	45	...	...
	22 15	22.7	765.25	30.015	65.	60.	...	.467	(A. 65.5)	81.	350	...	...	1.0	Ci-cu., Ci-s, Cu-s.	...	...	...
18	0 15	23.4	765.00	30.002	64.8	60.6	...	.487	3 A. M.: (D. 53.3)	81.5	350	...	...	.5	N., Cu.	...	...	...
	2 15	22.1	764.75	29.999	63.2	62.1	...	.549	(D. 53.3)	85.	290	...	.12	.4	N., light rain.	...	...	...
	4 15	21.8	764.20	29.979	61.9	61.	...	.531	(A. 63.)	85.	296	...	...	.8	S., Cu., Ci., Ci-cu., N.	...	...	...
	6 15	21.5	764.70	30.000	61.8	60.5	...	.517	9 A. M.: (D. 58.3)	85.	55	...	.03	.7	Ci cu., N., rain.	...	...	...
	8 15	21.	764.50	29.994	62.5	60.8	...	.518	(D. 58.3)	85.	290	...	...	1.0	Cu-s, N., rain.	0	...	...
	10 15	20.7	763.75	29.966	62.4	60.9	...	.523	(A. 62.8)	89.5	290	...	.06	1.0	Ci-cu., Cu-s, N., rain.	337	...	...
	12 15	20.8	763.50	29.955	61.6	61.3	...	.543	3 P. M.: (D. 57.)	91.4	283	...	.40	1.0	Ci-cu., Cu., N., rain.	337	...	...
	14 15	20.5	763.00	29.936	60.5	59.1	...	.492	(D. 57.)	89.5	275	...	.35	1.0	Cu., Cu-s.	337	...	...
	16 15	20.	762.55	29.923	60.4	58.9	...	.487	(A. 60.7)	90.	270	...	...	1.0	Cu., N., Cu-s, Ci cu.	315	...	...
	18 15	19.9	762.00	29.903	60.	58.5	...	.481	9 P. M.: (D. 57.)	92.	250	...	.05	1.0	Cu., Ci-cu., N., rain.	315	...	...
	20 15	19.6	762.00	29.903	58.	57.2	...	.467	(D. 57.)	93.5	260	...	.05	1.0	Cu., Ci cu., N., rain.	...	...	...
	22 15	19.	763.00	29.905	59.	58.	...	.478	(A. 58.8)	93.	250	...	.09	1.0	N., rain.	...	...	...

[1841.

DAILY METEOROLOGICAL OBSERVATIONS.

JUNE.]

Date.	Hour.	Barometer.			Thermometers, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Baume's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir., degrees.	Force, lbs.				1.	2.	3.
19	h. m.																
	0 15	19.	761.20	29.874	60.	59.5	.509	3 A. M.:	92.1	257	.	.12	1.0	N., rain.	.	.	.
	2 15	18.8	760.45	29.845	60.7	60.	.515	(D. 58.)	93.	280	.	.15	.8	N.	.	.	.
	4 15	18.8	760.35	29.841	61.3	60.8	.531	(A. 60.8)	91.5	240	.	.02	1.0	N., rain.	.	.	.
	6 15	18.7	761.00	29.868	61.8	60.3	.511	9 P. M.:	92.8	207	.	.	.9	N., Cu., mist.	.	.	.
	8 15	18.9	761.30	29.878	62.5	61.3	.533	(D. 60.3)	91.	220	.	.	1.0	Ci-s., Cu s.	225	.	.
	10 15	19.1	761.35	29.879	64.4	62.7	.533	(A. 63.)	90.	210	.	.	1.0	Ci-s., Cu-s.	270	.	.
	12 15	19.8	761.50	29.883	64.7	62.6	.547	3 P. M.:	89.	210	.	.	1.0	Ci-s., Cu-s.	247	.	.
	14 15	20.1	761.40	29.877	66.4	63.4	.552	(D. 60.3)	87.	220	.	.	1.0	Ci-cu., Ci-s., Cu-s.	.	.	.
	16 15	20.5	761.40	29.874	66.5	63.4	.551	(A. 66.5)	87.	220	.	.	1.0	Ci-cu., Ci s., Cu s.	180	.	.
	18 15	20.5	761.60	29.882	66.	63.	.544	9 P. M.:	87.	216	.	.	1.0	Cu., Ci-cu., Cu s.	225	.	.
	20 15	20.3	761.70	29.888	62.9	60.6	.508	(D. 59.)	89.	240	.	.	.3	Ci., Ci-cu., Cu-s.	270	202	.
21	22 15	20.	761.80	29.893	60.	59.	.495	(A. 62.5)	91.	240	.	.	.	Clear.	.	.	.
	0 15	22.7	763.80	29.958	65.	64.8	.611	.	90.	61	.	.	.05	Ci., Cu.	.	.	.
	2 15	22.	764.05	29.972	64.	62.8	.581	.	90.	243	.	.	.1	Cu.	.	.	.
	4 15	21.8	765.00	30.010	65.	64.	.586	.	91.5	250	.	.	.9	Ci-s., S., N.	135	.	.
	6 15	21.3	765.95	30.046	63.2	61.6	.534	9 A. M.:	90.5	260	.	.	1.0	Ci-s., N.	.	.	.
	8 15	21.	766.60	30.078	62.5	61.	.524	(D. 59.6)	90.5	280	.	.	1.0	Ci s.	270	.	.
	10 15	20.9	767.10	30.097	64.5	61.7	.523	(A. 63.)	86.3	280	.	.	1.0	Ci-s., Ci-cu.	315	.	.
	12 15	21.5	767.15	30.097	66.6	64.2	.552	3 P. M.:	81.5	283	.	.	1.0	Cu., Ci cu.	315	.	.
	14 15	22.	767.15	30.094	70.5	65.4	.568	(D. 61.)	80.	320	.	.	1.0	Cu., Ci cu.	315	90	.
	16 15	22.5	767.15	30.091	70.	64.5	.545	(A. 71.7)	80.1	315	.	.	1.0	Cu., Ci-cu.	315	.	.
	18 15	22.2	767.00	30.086	67.9	62.5	.508	9 A. M.:	80.2	335	.	.	1.0	Ci-cu., Cu-s.	45	.	.
	20 15	21.8	767.05	30.091	64.6	60.5	.486	(D. 57.4)	82.2	340	.	.	1.0	Ci-cu., Cu s.	.	.	.
	22 15	21.2	766.90	30.089	62.5	59.8	.490	(A. 64.)	87.	313	.	.	.	Clear.	.	.	.

[1841.

DAILY METEOROLOGICAL OBSERVATIONS.

June.]

Day.	Hour.	Baromet.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., saturation.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
22	h. m.																	
	0 15	21.	766.65	30.080	62.7	60.3	...	.501	3 A. M.: (D. 54.5)	89.	332	..	..	.8	Cl s., Cu.....	..	..	..
	2 15	20.7	766.40	30.071	62.8	61.1	...	.524	(A. 63.)	90.5	321	..	..	1.0	Cl., Ci-cu., Ci s.....	..	..	..
	4 15	20.3	766.60	30.081	63.	61.2	...	.524	(A. 63.)	90.5	355	..	..	1.0	Cl., Ci-cu., Ci s.....	..	..	..
	6 15	20.3	766.00	30.057	63.9	62.1	...	.541	9 A. M.: (D. 60.8)	90.3	359	..	..	1.0	Cl-s., Ci-cu., Cu.....	..	..	..
	8 15	20.1	765.70	30.046	65.2	63.2	...	.560	(A. 65.6)	89.	0	..	..	1.0	Cl-s., Ci-cu., Cu.....	..	..	..
	10 15	20.3	765.40	30.033	66.8	64.6	...	.594	(A. 65.6)	89.	0	..	..	1.0	Cl-s., Ci-cu., Cu.....	..	..	..
	12 15	20.5	765.25	30.025	65.7	64.7	...	.600	3 P. M.: (D. 66.8)	91.	330	..	.20	1.0	N., Ci-cu., N., rain..	315	..	..
	14 15	20.8	764.35	29.989	68.7	67.7	...	.663	(D. 66.8)	91.	335	..	.03	1.0	N., rain.....	337	..	..
	16 15	21.2	763.40	29.950	70.7	69.4	...	.698	(A. 69.4)	91.1	330	..	.03	1.0	Ci-cu., Cu-s.....	22	..	..
	18 15	21.8	762.90	29.928	71.8	69.8	...	.700	9 P. M.: (D. 64.7)	89.9	318	..	..	.7	Ci-cu., Cu-s.....	22	..	..
	20 15	21.9	762.45	29.909	68.8	67.	...	.639	(D. 64.7)	91.6	350	..	..	1.0	Ci-cu., Cu-s.....	45	..	..
	22 15	21.9	762.60	29.915	67.2	65.8	64.8	.618	(A. 68.1)	92.	0	..	..	.2	Ci-cu., Cu-s.....	..	..	..
	0 15	21.8	762.45	29.910	67.8	66.3	67.	.627	3 A. M.: (D. 59.5)	92.8	353	..	..	.6	Cu., Ci., Ci-s.....	45	0	..
	2 15	21.8	761.20	29.861	67.7	66.7	...	.642	(D. 59.5)	94.	351	..	..	1.0	N., rain.....	..	..	..
	4 15	21.8	761.00	29.853	68.	67.3	...	.658	(A. 67.6)	94.1	352	..	..	.9	Ci-s., Cu-s.....	..	..	..
23	6 15	21.9	760.60	29.837	69.1	69.7	...	.693	9 A. M.: (D. 69.6)	93.8	352	..	..	.8	Ci-s., S.....	..	..	..
	8 15	22.	760.60	29.837	72.	70.9	...	.736	(D. 69.6)	91.5	0	..	..	1.0	Ci-s., Ci-cu.....	..	..	..
	10 15	23.2	760.35	29.820	76.8	74.	...	.796	(A. 73.)	88.4	115	..	..	.8	Cu., Ci-cu., N.....	90	45	157
	12 15	25.8	760.05	29.796	80.7	75.8	...	.932	3 P. M.: (D. 73.4)	83.	70	..	..	.8	Cu., Ci-cu., N.....	22	45	90
	14 15	27.	759.50	29.769	83.	77.5	...	.864	(D. 73.4)	83.	30	..	..	.6	Cu., Ci-cu.....	22	90	..
	16 15	28.	759.15	29.760	83.8	77.7	...	.885	(A. 83.2)	83.	305	..	..	.7	Cu., Ci-cu., N., Cu s.....	..	..	..
	18 15	28.4	758.95	29.741	83.	78.	...	.885	9 P. M.: (D. 70.5)	84.7	19	..	..	.9	Cu., Ci-cu., Cu-s.....	45	45	45
	20 15	27.3	759.50	29.767	75.	73.	...	.779	(D. 70.5)	90.3	35	..	..	.2	Cl., Cu., Ci-s., Cu-s.....	90	90	90
	22 15	26.7	759.60	29.774	73.5	72.759	(A. 74.5)	91.7	359	Cu-s. (?).....

JUNE.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Date.	Barometer.			Thermometers, Fah.			Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.		Dir., degrees.	Force, lbs.				1.	2.	3.
24	0	15	26.2	759.50	29.773	73.2	71.9	...	...	...	...	1.0	Ci cu., N., rain.	...	...	...
	2	15	25.9	758.90	29.751	71.5	70.2	68.8	33	...	...	.6	S., fog.	...	...	...
	4	15	25.1	759.75	29.788	68.8	67.2	...	63	...	...	1.0	S.	...	...	...
	6	15	25.2	759.75	29.787	71.5	70.8	...	63	...	...	...	...	...	...	...
	8	15	25.9	750.55	29.816	76.8	73.9	...	165	...	...	.5	Ci., Ci cu., Ci-s.	...	...	...
	10	15	27.3	750.70	29.815	82.2	77.	112.	45	...	...	.6	Ci., Cu., Ci-cu., Ci-s.	270	337	90
	12	15	28.5	750.90	29.817	85.1	78.2	120.5	45	...	...	.5	Ci., Cu., Ci-cu., Ci-s.	0	0	90
	14	15	29.8	750.65	29.802	84.9	77.	114.	40	...	...	.3	Ci., Cu., Cu-s.	45	...	90
	16	15	30.5	750.59	29.791	86.5	76.6	114.	39	...	...	.7	Ci., Ci-cu., Cu.	...	...	...
	18	15	30.6	750.40	29.787	84.8	76.1	...	42	...	...	.4	Ci., Ci-s., Cu., Ci-cu.	...	...	...
	20	15	29.2	751.15	29.823	78.6	75.	...	20	...	...	...	Ci s.	...	...	...
	22	15	28.	751.70	29.851	75.	72.5	...	20	...	...	...	Ci-s.	...	...	...
	25	0	15	...	...	...	...	...	...	...	...	...	...	...	...	...
	2	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	4	15	26.2	761.55	29.854	71.6	71.	...	250	...	...	1.0	Foggy.	...	...	...
	6	15	26.1	762.25	29.881	70.5	69.6	...	256	...	...	1.0	Foggy.	...	...	...
	8	15	25.7	762.20	29.880	72.	71.	...	260	...	...	...	S.	...	...	...
	10	15	25.9	762.10	29.876	75.4	73.2	...	190	...	...	1.0	S., Ci-s.	...	...	...
	12	15	26.7	762.00	29.868	76.5	74.4	...	88	...	...	1.0	Ci s., Ci-cu., Cu s.	315	0	45
	14	15	27.	761.40	29.844	75.	74.	...	250	...	...	.24	Cu., Cu-s., Ci-s., N., rain	270	45	...
	16	15	26.6	761.65	29.855	72.	70.4	...	260	...	...	1.23	Cu., Cu-s., N., rain.	225	...	...
	18	15	26.2	761.45	29.850	72.5	71.5	...	230	...	...	1.0	Cu., Cu-s., N., rain.	315	...	...
	20	15	25.7	761.50	29.853	72.5	71.7	...	260	...	...	1.0	Cu., Cu-s., N., rain.	315	...	...
	22	15	25.3	761.25	29.846	72.	71.8	...	265	...	...	1.0	Cu., Cu-s., S., Ci-s.	...	...	...

Day.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
26	0	25.3	760.30	29.809	72.8	72.2	...	.774	3 A. M.: (D. 70.5)	92.8	312	...	...	.8	Cl-a, N	...	...	...
	15	25.2	759.90	29.798	72.7	72.1	...	.771	(A. 72.7)	92.5	357	...	...	1.0	Cl-a, Cl-cu, N	...	...	...
	2	25.1	760.30	29.806	72.6	72.0	...	.768	(A. 72.7)	92.5	1	...	.01	...	N, Cl-a, S	180	157	...
	4	25.1	760.65	29.834	73.1	72.5	...	.781	9 A. M.: (D. 70.3)	93.4	21	...	...	.8	N, Cl-cu, Cl-a	225	225	...
	6	25.1	760.65	29.834	73.1	72.5	...	.762	(D. 70.3)	88.3	30	...	...	.7	Cu, Cl-cu, Cl-a	45	370	180
	8	25.5	761.00	29.834	73.1	73.1	...	.776	(A. 76.1)	88.3	30	...	...	.7	Cu, Cl-cu, Cl-a	45	370	...
	10	26.8	760.90	29.835	73.1	73.1	...	.828	3 P. M.: (D. 69.5)	80.5	45	...	...	.9	Cu, Cl, Cl-cu	45	90	135
	12	27.9	760.75	29.814	72.8	76.4	...	.752	(D. 69.5)	77.5	45	...	...	.8	Cu, Cl, Cl-cu	45	90	...
	14	28.6	760.60	29.805	72.9	74.6	...	.750	(A. 82.)	77.5	45	...	...	1.0	Cu, Cl-cu, Cu-s	45	90	...
	16	29.1	760.30	29.791	72.8	74.3	...	.757	9 P. M.: (D. 70.)	81.6	60	...	...	1.0	Cu, Cl-cu, Cu-s	67	67	...
	18	28.1	760.60	29.808	73.5	73.5	...	.759	(A. 74.)	91.7	25	...	...	.9	Cl-cu, Cu-s	...	45	...
	20	27.7	761.00	29.824	75.7	71.7	...	.746	(A. 74.)	88.8	15	...	...	.7	Cu, Cl-cu, Cu-s	...	...	...
	22	27.1	760.20	29.795	73.7	71.7	...	.702	3 A. M.: (D. 59.5)	90.4	56	...	...	.3	Cl, Cl-cu, Cl-a	...	...	...
	0	25.1	761.35	29.851	69.2	69.2	...	.620	(D. 59.5)	90.4	41	...	...	.1	Cl-a, S	...	...	...
	2	24.5	761.75	29.870	67.6	66.1	...	.569	(A. 67.)	90.4	84	...	...	.2	Clear	...	...	...
	4	23.8	762.30	29.893	65.2	63.5	...	.578	9 A. M.: (D. 62.)	86.1	100	...	...	.05	Cu, Cl-a	90	90	...
	6	24.4	763.65	29.907	68.5	65.5	...	.610	(A. 74.4)	81.5	90	...	...	.1	Cu, Cl-a	90	90	...
28	8	25.4	763.10	29.922	72.6	67.4	...	.604	(A. 74.4)	77.1	110	...	...	.8	Cu, Cl-cu, Cl-a	112	90	56
	10	25.1	763.20	29.923	75.5	68.2	121.3	.628	3 P. M.: (D. 59.5)	73.1	115	...	...	.6	Cu, Cl-cu, and Cl	90	157	304
	12	26.1	763.10	29.914	77.6	69.6	112.5	.672	(D. 59.5)	73.1	112	...	...	.5	Cu, Cl-cu, Cl-a	90	90	90
	14	26.9	763.15	29.912	80.1	71.6	95	.612	(A. 70.4)	70.1	120	...	...	...	...	...	...	...
	16	28.1	762.80	29.894	81.3	70.3	...	.760	9 P. M.: (D. 67.5)	82.5	69	...	...	...	...	...	...	...
	18	28.1	762.70	29.890	81.3	70.3	...	.714	(D. 67.5)	82.5	69	...	...	...	...	...	...	...
	20	27.3	763.40	29.920	74.3	71.1	...	.663	(A. 72.)	87.1	68	...	...	...	...	...	...	...
	22	26.7	763.50	29.927	72.1	68.8	...	...	...	...	...	...	...	...	...	...	...	...
	15	26.7	763.50	29.927	72.1	68.8	...	...	...	...	...	...	...	...	...	...	...	...
	15	26.7	763.50	29.927	72.1	68.8	...	...	...	...	...	...	...	...	...	...	...	...

[1841.

DAILY METEOROLOGICAL OBSERVATIONS.

June.]

Date.	Hour.	Barometer.			Thermometer, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Bausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir., degrees.	Force, lbs.				1.	2.	3.
29	0 15	26.	763.70	29.938	70.2	68.	.656	3 A. M.: 88.8	66	..	..	..	..	Clear .....	..	..	..
	2 15	25.5	763.86	29.946	67.8	65.9	.613	(D. 62.5) 89.	70	..	..	..	..	Cl-cu .....	..	..	..
	4 15	24.8	764.00	29.957	66.1	64.5	.589	(A. 67.2) 92.5	28	..	..	..	..	S., Cl-s .....	..	..	..
	6 15	24.8	764.15	29.963	70.9	68.	.649	9 A. M.: 87.5	62	..	..	..	..	Clear .....	..	..	..
	8 15	25.7	765.00	29.990	77.3	70.5	.663	(D. 68.8) 78.5	120	..	..	..	..	Clear .....	..	..	..
	10 15	26.7	764.70	29.975	80.8	73.	.714	(A. 79.) 76.5	120	..	..	..	..	Clear .....	..	..	..
	12 15	28.4	764.75	29.969	83.6	75.	.758	3 P. M.: 73.8	108	..	..	..	..	Clear	90	..	..
	14 15	30.3	764.15	29.939	85.3	75.5	.759	(D. 69.5) 71.5	110	..	..	..	.05	Cu	90	..	..
	16 15	30.3	763.40	29.905	86.5	76.	.766	(A. 85.7) 70.5	60	..	..	..	.05	Cu .....	..	..	..
	18 15	30.2	763.50	29.909	84.8	76.5	.805	9 P. M.: 76.2	60	..	..	..	..	Few detached Cu .....	..	..	..
	20 15	29.2	763.40	29.911	78.6	74.5	.795	(D. 69.7) 83.	60	..	..	..	..	Light Cl., Cl-s .....	..	..	..
	22 15	27.2	763.40	29.920	74.1	71.6	.738	(A. 77.5) 88.	60	..	..	..	..	Clear .....	..	..	..
	0 15	27.4	763.45	29.921	73.2	70.	.688	3 A. M.: 88.9	58	..	..	..	..	Cl .....	..	..	..
	2 15	26.8	763.25	29.916	72.6	69.4	.675	(D. 62.8) 87.	78	..	..	..	..	Clear .....	..	..	..
	4 15	25.8	763.40	29.927	68.8	67.	.639	(A. 70.2) 89.	56	..	..	..	.2	Cl-s, S .....	..	..	..
30	6 15	26.	763.35	29.924	73.7	71.	.721	9 A. M.: 87.2	46	..	..	..	.05	Cl., S .....	..	..	..
	8 15	27.7	763.80	29.934	80.4	73.6	.740	(D. 67.5) 79.	110	..	..	..	..	Clear .....	..	..	..
	10 15	28.8	763.80	29.928	84.4	74.1	.716	(A. 82.2) 74.	100	..	..	..	..	Clear .....	..	..	..
	12 15	30.8	763.30	29.899	86.6	75.2	.733	3 P. M.: 71.	95	..	..	..	..	Cu	90	..	..
	14 15	31.3	763.00	29.846	88.	74.8	.703	(D. 65.) 68.	100	..	..	..	..	Cu	90	..	..
	16 15	31.3	761.30	29.819	98.5	76.5	.764	(A. 88.5) 68.8	98	..	..	..	.1	Cu .....	..	..	..
	18 15	31.6	761.00	29.805	85.8	75.9	.770	9 P. M.: 73.2	45	..	..	..	..	Clear .....	..	..	..
	20 15	30.7	761.15	29.815	80.3	73.5	.739	(D. 66.5) 79.	55	..	..	..	..	Cu-s. in W .....	..	..	..
	22 15	30.1	761.55	29.835	77.	72.	.720	(A. 78.5) 93.	60	..	..	..	..	Cu-s. in W .....	..	..	..

MAGNETIC OBSERVATORY,

AT THE

GIRARD COLLEGE, PHILADELPHIA.

ORDINARY METEOROLOGICAL OBSERVATIONS,

FROM JULY TO DECEMBER, 1841.

GENERAL NOTES.

On May 11th, a new spring was put in the anemometer, for regulating the force of wind, which decreased the scale of motion of the pencil.

The instruments, times of recording, and matters relating to the observations generally, are otherwise as before explained in the general notes.

The height of the cistern of the barometer above mean tide at the Schuylkill water works, is 112.3 feet.

JULY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Day.	Date.	Barometer.			Thermometers, Fah.			Dew point, Fah.	Hygr., Gauss's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
1	y.														135		
	0	15	761.00	29.824	74.6	72.	68.8	.745	86.	68			.3	Ci., Cu., Ci-cu.			
	1	15	760.70	29.814	73.	71.3	70.5	.739	89.	37			.05	Ci., Ci-cu.			
	2	15	760.25	29.799	71.5	70.	70.	.710	88.6	36				Ci., Ci-cu., S.	90		45
	4	15	760.20	29.794	75.5	73.6		.791	88.	43				Ci., Ci-cu., Cu-a.			
	6	15	760.10	29.785	82.	74.		.759	76.4	70	.1			Cu., Cu-a., Ci-s.		45	
	8	15	760.10	29.775	83.7	74.6		.743	73.	90	.3			Ci., Cu., Ci-s.		90	
	10	15	759.90	29.775	86.8	76.5	122.	.781	73.	100	.3			Ci., Cu., Ci-s., Cu-a.		90	
	12	15	759.00	29.730	86.8	76.5		.748	70.2	130	1.0			Ci., Cu., Ci-s., Cu-a.		90	
	14	15	758.40	29.705	88.2	76.		.709	86.	130	.8			Ci., Cu., Ci-s., Cu-a.	135		
	16	15	758.80	29.722	75.4	71.2		.767	78.	193	.2		1.0	Ci-cu., Cu-a.	135	45	
	18	15	759.30	29.743	77.3	73.4		.733	91.6	45				Ci-cu., Cu-a.	135		
	20	15	759.95	29.777	75.7	72.		.747	90.	45				Ci-cu., Cu-a.			
	22	15	760.20	29.795	74.5	72.		.726	89.8	150	.1			Ci., Ci-cu.			
	0	15	759.85	29.780	73.2	71.		.676	89.	180	.3			Ci., Ci-cu.			
	2	15	760.35	29.804	72.	69.2	69.2	.632	88.6	211	.3			Ci., Ci-cu.	90	45	
	4	15	760.95	29.832	70.8	67.5		.542	81.	212	.2			Ci., Ci-cu.	90	135	
	6	15	761.15	29.840	70.5	64.6		.454	71.	180				Ci., Ci-cu.			
	8	15	761.80	29.870	71.5	62.1		.458	68.3	205	.6			Ci., Ci-cu., Ci-s.		90	
	10	15	762.00	29.875	75.4	63.7		.457	66.5	120	.3			Ci., Ci-cu., Ci-s.		90	
	12	15	761.90	29.864	76.7	64.		.456	64.4	125	.1			Cu., Ci cu., Ci-s.		90	
	14	15	761.50	29.849	78.2	64.5		.426	63.	160	.1			Ci., Cu., Ci-cu., Ci-s.		90	
	16	15	761.20	29.837	78.2	63.5		.567	70.	150				Ci., Cu., Ci-cu., Ci-s.		90	
	18	15	761.40	29.847	76.6	67.4		.417	69.5	190				Ci., Ci-cu., Ci-s.		90	
	20	15	762.00	29.876	71.1	60.7		.365	71.	195				Ci., Ci cu., Ci-s.		90	
	22	15	762.50	29.903	66.	56.8	63.5										

[1841.

DAILY METEOROLOGICAL OBSERVATIONS.

JUN.]

Date.	Hour.	Barometer.			Thermometers, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir., degrees.	Force, lbs.				1.	2.	3.
3	h. m.																
	0 15	23.	763.15	29.931	63.4	54.	323	3 A. M.: (D. 46.5)	71.	236	..	..	.4	Ci. ....	..	90	..
	2 15	21.7	763.00	29.931	58.2	53.	356		77.	212	..	..	.5	Ci., Ci-cu.	135	90	..
	4 15	21.5	763.00	29.932	58.	52.8	353	(A. 58.6)	79.	190	..	..	.7	Ci., Ci-cu., S.	90	135	90
	6 15	21.	763.45	29.952	59.2	55.	422	9 A. M.: (D. 51.)	79.4	319	..	..	.9	Ci., Ci-cu., S.	90	90	..
	8 15	21.8	763.60	29.955	57.2	57.2	375	(D. 51.)	74.	260	1	..	.5	Ci., Ci-cu., Ci-s. ....	..	90	..
	10 15	22.9	763.50	29.946	71.	62.6	476	(A. 68.3)	74.	270	3	..	.6	Ci., Cu., Ci-cu., Ci-s. ....	..	90	..
	12 15	23.3	763.20	29.931	71.4	60.8	418	3 P. M.: (D. 47.5)	69.5	190	1	..	.7	Ci., Cu., Ci-cu. ....	..	180	..
	14 15	23.8	762.55	29.903	73.	61.7	437	(A. 73.3)	68.	132	..	..	.3	Cu., Ci-cu., Ci-s. ....	..	..	..
	16 15	24.7	762.00	29.878	74.3	62.	431	(A. 73.3)	67.	135	..	..	.1	Cu., Ci-cu., Ci-s. ....	..	135	..
	18 15	25.	762.10	29.880	74.4	62.9	447	9 P. M.: (D. 47.3)	66.8	127	..	..	.1	Cu., Ci-cu., Ci-s. ....	..	..	..
	20 15	23.8	762.70	29.909	69.	59.5	409	(D. 47.3)	71.5	180	..	..	.4	Ci-cu. ....	..	..	..
	22 15	21.6	763.40	29.947	63.2	56.	377	(A. 65.)	74.	200	..	..	.05	Ci-cu. ....	..	..	..
	0 00	21.9	762.80	29.923	60.8	60.5	529	3 A. M.: (D. 55.5)	72.9	58	..	..	.1	Ci. ....	..	90	..
	2 00	21.5	762.20	29.902	60.3	57.4	447	(D. 55.5)	72.4	58	..	..	.3	Ci., Cu., S., Ci-s.	135	90	45
	4 00	21.	761.60	29.880	60.8	59.	486	(A. 60.4)	73.	26	..	..	.8	Ci-cu., Ci-s., S.	90	90	0
	6 00	21.	761.30	29.864	66.1	64.	573	9 A. M.: (D. 64.5)	88.	30	..	..	.6	Cu., Ci-cu.	90	90	0
	8 00	22.	760.80	29.845	70.2	67.2	630	(A. 72.2)	82.5	60	..	..	.3	Cu., Ci-cu.	90	90	45
	10 00	24.	760.40	29.818	75.8	70.2	668	(A. 72.2)	82.	70	3	..	.7	Ci., Cu., Ci-cu.	90	348	..
	12 00	26.5	760.15	29.798	79.4	69.6	610	3 P. M.: (D. 66.)	78.	28	5	..	.3	Cu., Ci-s.	90	90	..
	14 00	28.2	759.00	29.744	82.5	69.3	566	(A. 83.6)	66.3	45	1.2	..	.1	Cu., Ci-s. ....	..	..	..
	16 00	29.	757.90	29.697	83.5	68.3	521	9 P. M.: (D. 59.3)	64.	40	2.1	..	.8	Cu., Ci-cu., Ci-s. ....	..	90	..
	18 00	28.	757.60	29.690	79.4	69.3	538		70.5	70	1.0	..	.9	Ci-cu., Cu-s., N. ....	..	135	..
	20 00	27.1	758.30	29.722	76.	69.	636		76.5	34	..	..	.49	Ci-cu., Cu-s. ....	..	90	..
	22 00	26.	758.70	29.742	66.7	65.	598	(A. 66.8)	89.5	315	1.5	..	.6	Ci-cu., Cu-s. ....	..	90	..

JULY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

Day.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
6	m.																	
	0 00	25.4	758.75	29.748	67.5	65.8	....	.615	3 A. M.: (D. 60.)	90.	105	..	..	.9	Cl., Cu., Ci-s., Cu-s...	..	90	..
	2 00	25.	758.25	29.729	66.8	65.4	....	.609	(A. 66.)	90.8	165	..	..	.2	Cl., Ci-cu.....	..	90	135
	4 00	23.9	758.80	29.756	63.5	62.5	61.8	.557	9 A. M.: (D. 65.)	92.	165	..	..	.05	Cl.....	..	..	..
	6 00	24.	759.00	29.762	68.5	66.	....	.610	9 A. M.: (D. 65.)	87.5	30	..	..	.1	Cl., Ci-s. in S.....	..	..	..
	8 00	25.1	759.30	29.770	74.1	69.	....	.647	(D. 65.)	80.	85	..	..	..	A little Ci-s. in S.....	..	..	..
	10 00	25.8	759.50	29.774	78.4	72.4	126.	.719	(A. 75.8)	79.5	20	..	..	.05	Cu., S.....	..	..	..
	12 00	27.1	759.30	29.761	81.	73.4	131.6	.726	3 P. M.: (D. 60.)	76.	70	..	..	.1	Cu., Ci-s.....	90	90	..
	14 00	29.	758.90	29.736	83.3	73.	124.5	.686	(D. 60.)	70.5	50	..	..	.3	Cu., Ci-cu., Ci-s.....	90	90	..
	16 00	29.8	758.25	29.707	84.4	71.5	100.	.621	(A. 84.5)	68.	40	.2	..	.4	Cu., Ci., Ci-s., Cu-s...	90	90	..
7	18 00	29.3	757.70	29.688	80.7	74.3	....	.766	9 P. M.: (D. 69.7)	78.5	35	.2	..	1.9	Ci-cu., Cu-s., Ci-s.....	90	90	..
	20 00	28.7	757.80	29.695	77.	73.4	....	.771	(D. 69.7)	87.	18	..	..	.1	Ci-cu., Cu-s.....	45	..	..
	22 00	28.	758.00	29.705	75.	72.8	....	.771	(A. 75.4)	91.7	35	..	..	.7	Ci-cu., Cu-s.....	45	45	..
	0 00	28.2	757.85	29.700	75.	73.2	72.6	.786	3 A. M.: (D. 63.5)	93.	55	..	..	.4	Cl., Ci-cu., Ci-s., S.....	..	90	45
	2 00	27.1	758.00	29.710	73.8	71.4	....	.734	(D. 63.5)	90.5	75	..	..	.8	Cl., Ci-cu.....	..	90	90
	4 00	26.8	759.00	29.750	71.6	69.5	....	.692	(A. 73.7)	91.	353	..	..	.7	Cl., Ci-cu., Ci-s., S.....	45	..	..
	6 00	25.5	759.75	29.785	71.8	69.	....	.672	9 A. M.: (D. 61.)	88.4	324	..	..	.9	Ci-cu., Ci-s.....	45	45	..
	8 00	25.	760.50	29.818	72.9	66.8	....	.587	(D. 61.)	81.5	220	..	..	..	Cu., S., Ci-s.....	..	..	45
	10 00	25.8	760.70	29.822	74.8	68.1	....	.607	(A. 73.)	78.5	245	..	..	.8	Cu., S., Ci-s.....	..	..	45
	12 00	26.4	761.00	29.831	77.4	70.4	....	.659	3 P. M.: (D. 66.2)	78.	115	..	..	1.0	Cu., Ci-cu., Ci-s.....	..	..	90
14 00	27.	26.3	759.65	29.774	77.9	72.5	....	.729	(D. 66.2)	79.5	324	..	..	1.0	Cu., Ci-cu., Ci-s., N.....	..	..	45
	16 00	26.3	759.90	29.788	75.5	70.	....	.664	(A. 77.)	82.5	180	..	..	1.0	Ci-cu., Ci-s., N.....	..	..	..
	18 00	25.5	760.00	29.795	68.	65.5	....	.600	9 P. M.: (D. 63.7)	89.	120	.4	.07	1.0	N., rain.....	..	..	..
	20 00	25.	758.80	29.751	67.4	65.5	....	.606	(D. 63.7)	91.5	295	2.2	.22	1.0	N., Cu-s., rain.....	..	..	..
22 00	24.3	760.25	29.811	65.5	64.3589	(A. 66.9)	93.7	130	1.0	Ci-cu., Cu-s.....

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

[97]

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Date.	Hour.	Barometer.			Thermometers, Fah.		Force of vapor, ins.	Dew point, Fah.	Hgt., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir., degrees.	Force, lbs.				1.	2.	3.
8	0 00	24.5	760.00	29.802	64.	62.8	.560	3 A. M.: (D. 57.)	93.8	88	..	..	.9	Cu., Ci cu., Ci-s.	..	..	..
	2 00	23.5	759.80	29.797	63.6	62.4	.553	(D. 57.)	95.	122	..	..	.2	Ci.	..	..	..
	4 00	23.7	760.10	29.809	63.2	61.7	.537	(A. 63.9)	93.	152	1	..	.3	Cu., Ci-s, S.	45	0	22
	6 00	21.9	761.00	29.852	62.6	60.	.493	9 A. M.: (D. 58.3)	89.	164	1.0	..	.4	Ci., Ci-cu.	135	90	45
	8 00	22.7	762.20	29.895	67.5	62.6	.514	(D. 58.3)	83.	180	1.0	..	.1	Ci-s.	..	..	..
	10 00	23.	762.75	29.916	70.7	61.5	.445	(A. 69.)	74.	150	1.0	..	.1	Cu., Ci-s.	..	..	157
	12 00	24.	763.90	29.912	71.8	61.2	.425	3 P. M.: (D. 57.5)	70.	150	7	..	.2	Cu., S.	..	..	157
	14 00	24.5	763.00	29.918	73.8	63.	.455	(D. 57.5)	71.	125	7	..	.3	Cu.	..	..	157
	16 00	24.7	763.20	29.925	74.9	63.7	.466	(A. 74.5)	68.	160	4	..	.4	Cu.	..	..	157
	18 00	25.2	763.40	29.930	74.5	64.2	.484	9 P. M.: (D. 54.3)	69.2	120	1	..	..	Cu., Ci cu.	..	..	..
9	20 00	24.8	763.70	29.945	68.7	63.	.513	(D. 54.3)	77.	120	..	..	..	Clear.	..	..	..
	22 00	23.7	764.60	29.986	64.5	60.5	.486	(A. 65.7)	83.	120	..	..	.5	A few Ci cu.	..	..	..
	0 00	22.8	765.00	30.005	61.6	59.1	.480	3 A. M.: (D. 52.4)	88.9	65	..	..	.9	Cu., Ci-cu.	..	..	..
	2 00	22.1	764.45	29.987	61.4	58.6	.467	(D. 52.4)	89.5	246	..	..	.1	Ci., Ci cu.	..	..	..
	4 00	21.7	765.00	30.010	59.	57.8	.472	(A. 61.)	92.	7	..	..	.08	Cu., Ci cu., S.	..	..	..
	6 00	21.5	765.45	30.030	62.8	60.	.491	9 A. M.: (D. 57.3)	87.	8	..	..	..	S.	..	..	..
	8 00	24.	766.00	30.038	73.8	62.8	.449	(D. 57.3)	..	40	..	..	..	A few detached Cu.	..	..	90
	10 00	25.	765.60	30.018	76.2	65.4	.449	(A. 71.)	70.	100	..	..	.2	Cu.	..	..	90
	12 00	26.	765.00	30.018	76.2	65.4	.502	3 P. M.: (D. 64.)	68.7	90	2	..	.3	Cu.	..	..	90
	14 00	26.	764.60	29.970	77.7	66.6	.525	(D. 64.)	68.5	100	4	..	.3	Cu.	..	..	..
10	16 00	27.1	763.60	29.930	79.5	69.5	.601	(A. 79.5)	70.	45	4	..	.7	Cu., Ci., Ci-cu., Ci-s.	135	135	..
	18 00	26.8	763.45	29.925	76.7	66.7	.539	..	71.	36	2	..	.8	Cu., Ci-cu., Ci-s.	157	135	..
	20 00	24.6	763.65	29.943	71.	65.	.549	..	80.	3	2	..	.1	Cu-s, Ci-s, Ci-cu.	157	45	..
	22 00	24.	763.35	29.933	69.3	65.4	.581	..	86.	40	..	..	..	Cu., Ci-cu.	..	22	..

July.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

Day.	Hour.	Barometer.			Thermometers, Fahr.		Force of vapor, ins.	Dew point, Fahr.	Hyg., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir., degrees.	Force, lbs.				1.	2.	3.
64	10	24.	762.20	29.888	69.6	67.2	.687	3 A. M.: (D. 60.4)	85.	25	.1	..	.8	Cl-s., Ci-cu.....	..	..	..
	2	23.9	761.35	29.856	69.5	69.2	.705	(A. 69.)	86.	43	.5	..	1.0	Cl-s., Ci-cu., Ci.....	..	..	..
	4	23.6	760.00	29.805	69.	69.	.670	9 A. M.: (D. 61.)	88.5	46	.3	..	.9	Cl-s., Ci-cu.....	..	..	..
	6	23.7	759.85	29.798	70.	67.9	.655	9 A. M.: (D. 61.)	87.	41	.2	..	1.0	Cl-s., Ci-cu.....	..	..	..
	8	23.8	759.75	29.793	71.6	71.6	.763	(A. 71.8)	82.7	47	.4	..	1.0	Cl-s., Ci-cu.....	..	90	45
	10	24.4	760.00	29.801	75.3	73.5	.794	3 P. M.: (D. 56.)	80.5	105	.2	..	.2	Cl-s., Ci-cu.....	..	..	45
	12	25.7	760.30	29.807	77.6	64.9	.475	(A. 79.8)	68.5	140	.7	..	.3	Cu., Ci-cu., Cu-s.....	..	90	90
	14	26.3	760.55	29.814	79.3	65.4	.472	(D. 56.)	68.	135	1.1	..	.1	Cu., Cu-s.....	..	135	135
	16	26.9	760.85	29.823	79.9	64.7	.444	(A. 79.8)	64.	135	.8	..	..	Cu., Ci-cu.....	..	135	185
	18	27.2	761.55	29.848	78.8	68.3	.572	9 P. M.: (D. 54.5)	65.3	135	.4	..	..	Cu., Ci-cu.....	..	180	90
	20	26.	762.10	29.875	72.	69.5	.687	(A. 69.6)	73.8	150	..	..	..	Cu., Ci-cu.....	..	..	90
12	22	25.8	762.75	29.902	68.	66.5	.631	3 A. M.: (D. 56.)	74.	44	..	..	1.0	Ci-cu.....	..	..	..
	0	22.8	760.30	29.821	62.4	62.2	.591	(A. 59.5)	73.6	158	..	..	.6	Cu., Ci-cu.....	..	..	..
	2	22.	759.90	29.809	59.8	59.7	.517	(D. 52.5)	72.8	158	..	..	..	Cu., Ci-cu., S.....	..	..	..
	4	21.4	759.50	29.796	58.	56.1	.437	(A. 59.5)	79.8	158	..	..	.1	Cu., Ci-cu.....	..	..	..
	6	21.	759.95	29.815	61.2	59.	.453	9 A. M.: (D. 52.5)	86.6	158	..	..	.2	Ci., Ci-cu.....	..	157	135
	8	21.9	760.40	29.829	68.6	66.1	.613	(A. 71.5)	73.5	215	..	..	.1	Ci., Ci-s.....	..	..	..
	10	23.3	760.55	29.828	71.	67.	.613	(A. 71.5)	66.5	262	..	..	.05	Ci-s., Ci-cu.....	..	135	135
	12	24.2	760.30	29.810	74.	64.4	.496	3 P. M.: (D. 50.)	67.	124	..	..	.1	Ci-s., Ci-cu.....	..	..	..
	14	25.	759.50	29.778	76.4	64.7	.432	(D. 50.)	66.	173	..	..	.05	Cu., Ci., Ci-s.....	..	..	..
	16	26.	759.30	29.765	79.	66.	.560	(A. 77.4)	68.9	106	..	..	.1	Ci., Ci-cu., Ci-s.....	..	..	..
	18	26.6	759.00	29.750	78.7	68.	.563	9 P. M.: (D. 60.)	75.	175	..	..	..	Ci-cu., Ci-s.....	..	..	..
	20	25.	759.65	29.784	69.5	65.	.568	(A. 67.5)	86.	14	..	..	..	Clear.....	..	..	..
	22	23.8	759.90	29.799	65.5	62.3	.529		86.	17	..	..	..		..	..	..

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
13	h. m.																	
	0 00	24.4	759.80	29.766	63.8	60.5	52.4	.504	3 A. M.: (D. 56.8)	92.2	22				Clear.....			
	2 00	23.4	759.35	29.788	62.8	61.6	61.	.538	(A. 61.4)	94.2	22				Clear.....			
	4 00	22.4	760.00	29.810	61.	59.5	...	.498	9 A. M.: (D. 60.5)	93.	22				S., Ci-cu., Ci-s.	90	90	
	6 00	22.4	760.00	29.810	67.	65.2	...	.601	9 A. M.: (A. 75.6)	90.3	22				Ci., Ci-cu., Ci-s.	90		
	8 00	23.5	760.60	29.829	74.	70.6	...	.702	(D. 60.5)	87.	56				Ci., Ci-cu., Ci-s.	90	90	135
	10 00	25.9	760.05	29.796	78.5	73.9	103.	.773	(A. 75.6)	83.4	27				Cu., Ci., Cu-s., Ci-cu.	90	90	135
	12 00	27.8	761.00	29.824	80.4	72.3	112.	.694	3 P. M.: (D. 68.5)	76.5	153				Cu., Ci., Cu-s., Ci-cu.	90	90	135
	14 00	29.	760.70	29.807	84.	76.5	106.5	.811	(A. 84.6)	75.5	43				Cu., Ci., Cu-s., Ci-s.	90	135	135
	16 00	30.	760.55	29.798	84.9	76.4	101.2	.799	9 P. M.: (D. 64.)	79.5	19				Ci., Ci-cu., Ci-s.	157	135	
	18 00	29.9	760.25	29.785	81.7	75.4	...	.786	(D. 64.)	82.5	5				Ci., Ci-cu., Ci-s.	45		
14	20 00	28.2	760.75	29.812	75.6	69.9	...	.660	(A. 73.5)	87.5	5				Clear.....			
	22 00	27.7	761.65	29.850	72.3	68.9	69.8	.662	(A. 73.5)	87.5	5				Clear.....			
	0 00	27.	761.40	29.844	72.	69.5	70.	.687	3 A. M.: (D. 64.)	90.3	17				Clear.....			
	2 00	26.7	761.25	29.839	70.8	69.	68.8	.684	(D. 64.)	92.	26				Ci., Ci-s.			
	4 00	26.2	761.30	29.844	70.3	68.7	...	.679	(A. 71.)	91.4	32				Cu., S., Ci-cu.	157	90	135
	6 00	25.8	761.55	29.855	71.5	68.9	...	.671	9 A. M.: (D. 67.)	89.8	21				Ci-s., Ci-cu.	67	90	
	8 00	26.3	761.40	29.847	78.	74.3	...	.793	(D. 67.)	87.	45				Cu., S., Ci-s.	45	45	45
	10 00	28.	761.75	29.853	81.4	76.5	...	.840	(A. 78.8)	85.2	66				Cu., Ci-s., Ci-cu.	45	11	45
	12 00	29.	761.45	29.836	82.5	76.	...	.808	3 P. M.: (D. 72.)	83.	260				Cu., Ci., Ci-cu., Ci-s.	11	11	191
	14 00	30.8	760.55	29.792	89.3	81.4	...	.900	(D. 72.)	79.2	25				Cu., Ci., Ci-cu., Ci-s.	11	11	11
	16 00	30.7	759.85	29.765	86.4	80.	...	.921	(A. 87.3)	81.4	5				Cu., Cu-s., Ci-s.	0	0	0
	18 00	30.	760.00	29.774	83.	76.4	...	.890	9 P. M.: (D. 70.5)	81.7	0				Cu., Cu-s., Ci-s.	45	22	22
20 00	28.6		759.45	29.759	79.	76.5	...	.868	(D. 70.5)	91.	10				Ci., Ci-s., Cu-s.	11		
	22 00	29.	761.20	29.826	75.	72.7	...	.787	(A. 78.4)	91.7	290		.04		Ci., Ci-s., Cu-s.		22	22

Day.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gaumette's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
15	0 00	28.	760.40	29.800	73.6	72.4	....	.772	3 A. M.:	93.	315	..	..	.4	Cl-cu., Cl-s.	..	..	..
	2 00	27.4	759.40	29.762	73.	72.3	....	.775	(D. 65.4)	93.5	325	..	..	.8	Cl-s., hazy.	..	..	..
	4 00	26.7	760.00	29.790	73.3	71.3	....	.748	(A. 71.6)	94.2	335	..	1.0	.0	Dense fog.	..	..	..
	6 00	26.8	760.80	29.822	73.3	72.8	....	.790	9 A. M.:	92.	322	..	..	.2	Cl., S., Cl-s.	..	..	..
	8 00	27.7	761.65	29.850	77.8	74.3	107.	.795	(D. 64.8)	83.2	36	..	..	.6	Cl., Cl-cu.	45	90	22
	10 00	28.8	761.65	29.844	80.5	77.9	112.7	.907	(A. 78.)	79.8	168	..	..	.5	Cl., Cu., Cl-cu.	135	135	90
	12 00	30.1	761.80	29.845	83.7	74.5	135.	.789	3 P. M.:	75.5	110	..	..	.4	Cu., Cl-cu.	135	135	135
	14 00	30.4	761.30	29.823	86.1	73.8	137.	.886	(D. 60.5)	70.	111	..	..	.05	Cu., Cl-cu.	135	135	135
	16 00	31.7	760.70	29.794	86.7	76.2	114.	.771	(A. 86.5)	65.	130	.4	..	.05	Cu., Cl-cu.	135	135	135
	18 00	31.3	760.30	29.781	85.5	73.4	....	.678	9 P. M.:	68.	125	..	..	..	Cu.	..	..	..
16	0 00	30.	760.70	29.802	78.3	71.8	....	.896	(D. 66.5)	74.3	120	..	..	.4	Cu-s. in Hor.	..	..	..
	2 00	28.2	760.65	29.808	76.	70.	.69.	.659	(A. 73.7)	82.	160	..	..	.05	Cl-cu.	..	..	..
	4 00	27.8	760.65	29.811	73.6	69.2	70.	.658	3 A. M.:	81.1	178	..	..	.4	Cl-s., Cl-cu.	..	..	..
	6 00	26.5	760.50	29.783	72.1	66.2	....	.842	(D. 57.)	83.	159	..	..	.7	Cl., Cl-cu., S., Cl-s.	90	157	135
	8 00	25.9	760.50	29.814	70.8	64.8	....	.545	(A. 71.)	80.5	165	..	..	.9	Cl., Cl-cu., S.	157	90	90
	10 00	25.1	760.65	29.821	69.3	63.1	....	.512	9 A. M.:	80.	178	..	..	.7	Cl., Cl-cu.	135	135	135
	12 00	26.2	761.00	29.837	72.	65.9	....	.569	(D. 57.5)	86.5	155	.1	..	.5	Cl., Cu., Cl-cu., Cl-s.	135	135	135
	14 00	27.2	761.80	29.864	74.6	66.9	106.8	.572	(A. 74.5)	76.	205	.5	..	.3	Cu.	191	191	191
	16 00	27.	761.85	29.860	77.2	68.	110.2	.580	3 P. M.:	75.	183	1.8	..	.0	Cu., Cl-cu.	135	135	135
	18 00	27.6	761.50	29.840	78.9	66.5	105.	.577	(D. 57.)	72.	127	.7	..	.8	Cu., Cl-cu., Cu-s.	135	135	135
22	0 00	27.4	762.25	29.874	76.5	68.8	....	.614	(A. 90.)	73.5	210	.3	..	.0	Cu., Cl-cu., Cl-s.	..	..	..
	2 00	27.	763.45	29.924	71.4	66.4	....	.589	9 P. M.:	73.5	220	1.0	..	.8	Cu., Cl-cu., Cl-s.	..	..	..
23	0 00	25.9	763.90	29.947	68.	63.5	63.5	.505	(A. 69.)	78.	170	..	..	..	Clear	235	90	..

Date.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
17	23.6	764.00	29.962	65.7	64.2	63.6	.564	3 A. M.: (D. 52.5)	79.8	171	.1	..	.1	Ci-a.....	..	..	..
0 00	23.3	763.75	29.953	62.6	62.	..	.552	(A. 61.)	83.5	169	..	..	..	Clear.....	..	..	..
2 00	22.8	763.65	29.952	60.6	57.	57.	.432	9 A. M.: (D. 51.5)	83.8	175	..	..	..	Slight Ci.....	..	..	..
4 00	22.4	764.50	29.987	62.1	60.2	..	.505	(A. 71.4)	84.8	176	..	..	..	Ci, S.....	..	..	..
6 00	22.4	765.45	30.020	70.5	60.6	108.	.421	(D. 51.5)	72.9	200	.1	..	.05	Ci, S.....	..	..	..
8 00	23.4	765.25	30.008	73.	62.5	118.	.448	(A. 71.4)	71.	226	.1	..	.15	Ci, S.....	..	..	..
10 00	24.2	765.25	30.001	76.3	65.	119.4	.490	3 P. M.: (D. 56.5)	68.2	223	..	..	.55	Ci, S.....	..	..	..
12 00	25.7	765.25	30.001	76.3	65.	119.4	.490	3 P. M.: (D. 56.5)	68.2	223	..	..	.9	Ci, S.....	..	..	..
14 00	26.	765.20	29.997	77.	63.5	..	.437	(A. 78.5)	66.	225	..	..	.1	Ci, S.....	..	..	..
16 00	27.	764.65	29.972	78.5	67.	102.	.528	(A. 67.5)	68.4	273	..	..	.04	Ci, S.....	..	..	..
18 00	27.	764.50	29.966	77.5	67.9	..	.570	(D. 51.5)	74.8	273	..	..	.02	Ci.....	..	..	..
20 00	26.6	764.95	29.988	71.	63.5	63.	.503	(A. 67.5)	79.	342	..	..	..	Clear.....	..	..	..
22 00	25.6	765.00	29.991	65.5	60.6	55.	.478	3 A. M.: (D. 54.2)	83.8	3	..	..	..	Clear.....	..	..	..
0 00	24.	764.65	29.985	63.	60.2	54.	.495	(A. 61.)	83.5	3	..	..	.3	A little Ci cu.....	..	..	..
2 00	23.8	765.20	29.986	61.3	59.8	54.	.503	(A. 61.)	89.5	3	..	..	.7	Ci, Ci-cu.....	..	..	..
4 00	23.	765.20	30.012	59.5	57.9	52.6	.470	9 A. M.: (D. 57.)	88.6	3	..	..	.05	Ci, Ci-cu, Cu.....	..	..	..
6 00	22.8	765.00	30.005	64.6	62.5	..	.544	(A. 74.4)	77.3	72	..	..	.1	Ci, Ci-cu, Cu.....	..	..	..
8 00	24.7	765.55	30.018	73.6	67.2	112.2	.591	(D. 57.)	73.5	52	..	..	.05	Ci, Ci-cu, Cu.....	..	..	..
10 00	25.4	765.80	30.025	77.	68.7	123.3	.602	3 P. M.: (D. 60.)	67.	5	..	..	.1	Ci, Ci-cu, Cu.....	..	..	..
12 00	27.2	765.95	30.021	81.	68.9	117.	.563	(A. 82.3)	65.	48	..	..	1.0	Ci, Ci-cu, Cu.....	..	..	..
14 00	27.6	765.60	30.006	82.2	71.9	123.3	.656	9 P. M.: (D. 63.)	68.5	44	..	..	.3	Ci, Ci-cu.....	..	..	..
16 00	29.3	765.40	30.090	83.	72.5	105.6	.668	(A. 82.3)	65.	48	..	..	..	Clear.....	..	..	..
18 00	28.4	766.00	30.014	81.	71.8	..	.665	9 P. M.: (D. 63.)	68.5	44	..	..	..	Clear.....	..	..	..
20 00	26.6	766.60	30.050	72.5	68.	..	.680	(A. 70.3)	79.	42	.2	..	..	Clear.....	..	..	..
22 00	26.	767.35	30.082	68.7	65.	65.9	.575	(A. 70.3)	87.3	12	.3	..	..	Clear.....	..	..	..

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

JULY.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Dew point, Fah.	Hygr., Gaussner's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
20	h. m.																
	0 00	25.4	767.50	30.092	65.7	64.3	68.	3 A. M.: (D. 61.8)	91.2	12	..	..	.05	Clear	..	..	..
	2 00	24.4	767.60	30.108	66.3	65.	63.2	(A. 65.8)	89.9	20	..	..	..	Clear	..	..	..
	4 00	24.1	768.00	30.117	63.1	61.6	57.9	9 A. M.: (D. 57.)	86.4	26	..	..	.2	Cl., Ci-a., S.	..	..	..
	6 00	23.5	768.75	30.150	67.3	64.	..	9 A. M.: (D. 57.)	86.4	26	..	..	.1	Cl., Ci-a., S.	..	..	..
	8 00	24.8	769.36	30.168	74.5	68.	113.	(A. 76.3)	78.2	92	..	..	..	..	..	..	..
	10 00	26.1	770.35	30.200	80.3	71.9	127.4	(A. 76.3)	73.2	284	..	..	.1	..	..	..	..
	12 00	26.8	770.95	30.210	83.	71.3	..	3 P. M.: (D. 53.?)	68.2	324	..	..	.05	Cu., Ci-cu., Ci-s.	315	315	315
	14 00	29.8	770.00	30.169	86.1	73.5	129.	(A. 86.5)	65.5	320	..	..	.3	Cu., Cu-s.	270	270	270
	16 00	30.	770.70	30.195	82.9	72.5	96.8	(A. 86.5)	69.2	31	1	..	.5	Cu., Cu-s.	270	225	270
	18 00	29.8	770.00	30.169	81.	71.6	..	9 P. M.: (D. 57.)	66.	42	6	..	.2	Cu., Cu-s., Ci-s.	270	270	270
	20 00	27.7	770.60	30.202	73.8	67.1	..	(D. 57.)	71.5	25	..	..	..	Hazy	..	..	..
	22 00	26.	771.00	30.226	68.	63.6	67.5	(A. 71.5)	81.	25	..	..	..	Clear	..	..	..
	0 00	25.4	771.30	30.242	64.2	61.8	67.4	3 A. M.: (D. 56.8)	84.8	22	..	..	..	Clear	..	..	..
	2 00	23.7	771.00	30.236	63.5	61.8	63.8	(D. 56.8)	84.	22	..	..	..	Clear	..	..	..
	4 00	23.6	771.00	30.237	60.8	59.5	51.	(A. 62.2)	87.9	22	..	..	.1	..	..	..	..
	6 00	23.	771.45	30.259	65.8	63.2	..	9 A. M.: (D. 61.5)	88.	23	..	..	.2	..	..	..	..
	8 00	24.8	772.00	30.272	73	69.	..	(D. 61.5)	81.5	23	..	..	.3	Cl., Ci-cu.	..	..	..
	10 00	25.5	772.10	30.271	78.3	70.8	109.	(A. 75.6)	75.3	5	..	..	.5	Cl., Ci-cu.	135	135	135
	12 00	27.6	771.90	30.255	81.5	73.5	117.	3 P. M.: (D. 62.8)	74.3	310	..	..	.8	Cu., Cu., Ci-cu., Ci-s.	0	135	185
	14 00	28.	770.80	30.209	84.5	73.5	..	(D. 62.8)	68.5	340	..	..	.9	Cl., Cu., Ci-s., Cu-s.	135	90	..
	16 00	28.6	770.00	30.174	81.9	75.	..	(A. 83.)	74.3	35	15	..	.9	S., Cl., Cu., Ci-s., Ci-cu	..	90	..
	18 00	28.3	769.75	30.166	78.5	68.5	..	..	76.	39	..	..	.5	Cl., Ci-cu., Cu-s.	..	99	..
	20 00	26.5	769.70	30.174	71.5	68.	68.2	..	79.8	25	25	..	..	..	..	..	..
	22 00	26.7	770.15	30.194	68.9	66.7	65.2	..	86.	25	Clear

JULY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Day.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
23	4. m.				67.5	66.	65.2	621		92.5	25			1	Ci-cu.			
	0 00	25	769.80	30.184	68.	67.5		.664		91.8	25			1.0	Ci-s., N.			
	2 00	24.3	769.00	30.155	70.	69.				92.7	33			1.0	Ci-s., N.			
	4 00	24.2	768.45	30.135	70.	69.7		.708		92.8	39			1.0	N.			
	6 00	24	768.40	30.133	70.8	72.2		.738		85.5	60			.8	Cu., Ci-cu., Ci-s.	90	90	90
	8 00	25.4	768.60	30.134	76.	74.7	119.	.774		81.	20			.6	Cu., Ci-cu., Ci-s., Ci.	90	90	90
	10 00	27.	768.50	30.124	81.	74.7	119.	.774		81.	20			.3	Cu., Ci-cu., Ci-s.	90	90	90
	12 00	28.8	767.50	30.074	83.	73.6	113.	.709		74.	20	3		.5	Cu., Ci-cu.	90	90	90
	14 00	29.8	766.50	30.032	84.3	74.	102.5	.714		71.5	50	1.0		.3	Ci-cu.	45		
	16 00	30.7	765.65	29.993	84.8	75.3	102.5	.757		70.1	45	7			Ci-cu., Ci-s.			
	18 00	30.4	765.60	29.992	83.7	70.8		.604		67.	82	1.3			Clear.			
	20 00	29.3	765.90	30.010	75.3	62.		.410		74.	45				Clear.			
23	22 00										45				Clear.			
	0 00	27.8	765.40	29.997	72.5	71.6	69.1	.756	3 A. M.:		48				Clear.			
	2 00	27.4	764.70	29.971	71.	67.5	68.	.630	(D. 64.8)		46				Clear.			
	4 00	26.6	764.65	29.973	70.	67.	67.	.625	(A. 70.8)		46			.6	Ci-cu., Ci-s., S.			
	6 00	26.	764.90	29.986	72.	69.7		.694	9 A. M.:		47			.05	Ci-cu.			
	8 00	26.7	765.20	29.994	78.4	73.7	110.5	.765	(D. 70.6)	79.5	45			.1	Slight Ci., Ci-s.			
	10 00	28.4	765.10	29.982	83.5	76.5	115.5	.819	(A. 81.2)	78.5	60	1		.2	Slight Ci., Ci-s., Cu.	135		
	12 00	30.3	764.90	29.965	86.4	78.	114.5	.825	3 P. M.:	71.	20	4		.2	Ci., Cu.			
	14 00	30.6	764.25	29.938	89.7	78.	121.3	.811	(D. 71.5)	68.	60	7		.2	Ci., Cu.			
	16 00	32.4	763.90	29.916	90.9	76.	110.	.718	(A. 91.4)	64.5	25	4			Ci-cu. in Hor.	90		
	18 00	32.4	764.05	29.922	88.8	76.5		.760	9 P. M.:	65.7	47	1			Ci., Ci-cu., Ci-s.			
	20 00	30.1	764.45	29.949	80.9	75.4		.802	(D. 72.)	80.9	20				Ci-s., very little.			
	22 00	28.1	764.40	29.957	77.	73.5	74.6	.774	(A. 78.8)	88.	30				Clear.			

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

Jury.]

Day.	Date.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
24	a. m.																	
	0 00	28.3	764.50	29.959	75.	72.6	73.2	.764	3 A. M.: (D. 63.6)	88.8	37	..	..	..	Clear.....	..	..	..
	2 00	28.	764.50	29.961	72.	70.3	68.6	.715	(A. 72.)	88.5	43	..	..	..	Clear.....	..	..	..
	4 00	27.2	764.50	29.964	71.6	70.4	68.3	.721	(A. 72.)	92.	44	..	..	..	S.....	..	..	..
	6 00	27.	764.80	29.978	73.6	71.8	...	.750	9 A. M.: (D. 73.)	89.	43	..	..	..	Clear.....	..	..	..
	8 00	28.4	765.50	29.998	82.	76.2	...	.821	(A. 84.4)	82.5	54	..	..	..	Clear.....	..	..	..
	10 00	30.	765.50	29.990	87.5	79.5	128.	.898	(A. 84.4)	77.	25	..	..	..	Cu., Ci-cu., Ci-s	90	..	..
	12 00	31.8	765.10	29.966	91.5	78.7	120.	.820	3 P. M.: (D. 74.)	69.	25	..	..	..	Cu., Ci-cu., Ci-s	45	..	..
	14 00	32.8	764.40	29.934	92.1	79.5	125.	.847	(D. 74.)	67.7	45	..	..	..	Cu., Ci-s, Ci-cu.....	45	..	..
	16 00	34.1	764.15	29.918	92.4	80.	111.5	.864	(A. 93.3)	69.5	60	..	..	..	Cu.....	22	..	..
	18 00	33.6	764.15	29.928	86.9	76.	...	.762	9 P. M.: (D. 73.)	73.1	5	..	..	..	Ci-cu., Ci-s.....	..	..	..
26	20 00	31.9	764.00	29.922	81.4	76.5	...	.840	(D. 73.)	78.6	14	..	..	..	Ci-cu., Ci-s.....	..	..	..
	22 00	30.6	764.20	29.936	79.7	75.5	...	.820	(A. 80.5)	87.1	8	..	..	..	N., Ci-s, Cu-s.....	..	..	..
	0 00	29.	761.20	29.826	73.1	71.6	...	.749	3 A. M.: (D. 65.3)	91.6	50	..	..	..	Ci-cu., N.....	157	..	..
	2 00	28.	760.60	29.808	72.3	70.9	...	.732	(D. 65.3)	92.	125	..	..	..	Ci-cu., N.....	90	67	..
	4 00	27.4	761.30	29.837	72.2	67.3	...	.610	(A. 72.8)	84.9	174	..	..	..	Ci., Ci-cu.....	315	..	..
	6 00	27.	763.00	29.906	71.3	67.1	...	.613	9 A. M.: (D. 57.)	83.	165	..	..	..	Ci., Ci-cu.....	180	..	..
	8 00	26.3	763.75	29.939	71.7	64.4	93.	.522	(D. 57.)	77.	160	..	..	..	Cu.....	180	..	..
	10 00	26.	763.90	29.940	73.6	65.5	100.	.536	(A. 71.6)	71.	160	..	..	..	Cu., Ci-cu.....	..	..	..
	12 00	26.5	763.90	29.945	76.	68.	105.	.430	3 P. M.: (D. 45.7)	68.	180	..	..	..	Clear.....	..	..	..
	14 00	27.	764.00	29.946	77.2	61.4	98.	.371	(D. 45.7)	68.8	187	..	..	..	Clear.....	..	..	..
	16 00	27.4	764.10	29.947	77.	65.5	95.2	.497	(A. 77.3)	68.2	127	..	..	..	Clear.....	..	..	..
	18 00	26.9	764.40	29.962	76.4	64.7	...	.478	9 P. M.: (D. 56.5)	64.7	166	..	..	..	Clear.....	..	..	..
	20 00	25.8	764.70	29.979	69.	60.5	...	.435	(D. 56.5)	64.	175	..	..	..	Clear.....	..	..	..
	22 00	24.9	765.65	30.020	65.	58.4	56.9	.421	(A. 66.5)	71.	190	..	..	..	Clear.....	..	..	..

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
27	h. m.																	
	0 00	24.1	765.45	30.016	63.3	57.2	56.	.407	3 A. M.:)	71.	250	..	..	..	Clear.....	..	..	..
	2 00	23.2	765.30	30.014	59.	54.4	51.	.392	(D. 44.))	76.	185	..	..	..	Clear.....	..	..	..
	4 00	22.	765.60	30.033	55.8	52.3	47.3	.364	(A. 57.1)	84.8	180	..	..	1	Ci.....	135	135	..
	6 00	21.4	766.30	30.064	57.9	55.	....	.409	9 A. M.:)	82.	180	..	..	2	Ci., Ci-cu.	135	90	..
	8 00	21.9	766.50	30.069	64.	59.5	106.5	.464	(D. 48.5)	74.	190	..	..	1	Ci., Ci-a.	135	135	..
	10 00	23.1	766.40	30.060	71.7	61.	113.	.419	(A. 71.))	67.3	210	..	..	2	Ci., Ci-a., Ci-cu.	..	..	..
	12 00	24.2	765.70	30.026	74.9	62.6	113.	.430	3 P. M.:)	64.	100	..	..	7	Ci., Ci-a., Ci-cu.	135	135	..
	14 00	25.4	764.60	29.978	80.	65.4	113.3	.459	(D. 49.?)	62.3	100	..	..	8	Ci., Ci-a., Ci-cu.	135	135	..
	16 00	26.9	764.20	29.954	81.	66.5	....	.486	(A. 79.5)	61.4	90	..	..	7	Ci., Ci-a., Ci-cu.	..	..	..
	18 00	26.9	763.30	29.918	78.9	68.6	....	.582	9 P. M.:)	65.2	67	..	..	9	Ci., Ci-a., Ci-cu.	..	45	..
	20 00	25.6	773.40	29.928	72.5	65.3	....	.541	(D. 57.))	73.	60	..	..	1	Ci., Ci-a.	..	..	..
28	22 00	25.1	763.10	29.919	68.5	63.5	....	.531	(A. 69.9)	81.	50	..	..	8	Ci-cu., Ci-a.	..	..	..
	0 00	24.7	762.25	29.888	67.7	64.96	65.1	.574	3 A. M.:)	82.9	37	..	..	6	Ci., Ci-a.	135	112	..
	2 00	24.2	761.45	29.859	68.	64.9	....	.580	(D. 58.5)	83.	49	..	..	1.0	Ci-a., N., Ci-cu.	..	..	..
	4 00	24.	761.20	29.849	68.1	65.9	....	.611	(A. 69.2)	85.	49	..	..	1.0	Ci-a., N., Ci-cu.	..	..	..
	6 00	23.6	761.50	29.864	68.6	65.8	....	.602	9 A. M.:)	84.5	60	..	..	1.0	Ci-cu., Ci-a.	..	..	..
	8 00	24.	761.40	29.857	75.	68.5	....	.618	(D. 60.))	78.	110	..	..	3	Ci-cu., Ci-a.	..	..	..
	10 00	25.2	761.90	29.872	78.2	68.2	....	.676	(A. 77.4)	72.3	130	3	..	7	Cu., Ci-cu., Ci-a.	..	..	..
	12 00	26.3	761.60	29.852	80.5	69.2	....	.584	3 P. M.:)	69.	140	7	..	8	Cu., Ci-cu., Ci-a.	..	..	..
	14 00	27.4	761.55	29.847	82.1	70.6	....	.614	(D. 57.))	65.5	105	1.0	..	6	Cu., Ci-a.	..	..	..
	16 00	28.1	761.90	29.859	80.9	69.5	....	.555	(A. 80.))	64.6	160	7	..	2	Cu., Ci-cu.	..	..	..
	18 00	28.1	761.95	29.861	78.5	66.5	....	.516	9 P. M.:)	65.1	210	1	..	..	Ci-cu., Ci-a.	..	..	..
	20 00	26.2	762.95	29.905	70.4	62.5	....	.478	(D. 51.5)	67.1	217	..	..	..	Clear.....	..	..	..
	22 00	24.8	764.10	29.961	66.	59.4	59.8	.438	(A. 69.))	73.	217	..	..	..	Clear.....	..	..	..

July.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Saunures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dtr., degrees.	Force, lbs.				1.	2.	3.
29	4. 00	23.6	764.65	29.984	62.6	55.1	59.	.359	3 A. M.: (D. 42.6)	73.2	224	..	..	..	Clear .....	..	..	..
	2 00	23.2	764.70	29.991	58.7	52.2	53.4	.328	(A. 57.2)	73.	197	..	..	..	Clear .....	..	..	..
	4 00	21.8	765.00	30.010	56.2	50.	50.	.302	9 A. M.: (D. 46.)	76.9	195	..	..	..	Clear .....	..	..	..
	6 00	21.3	765.45	30.030	57.	52.1	...	.345	(A. 67.1)	71.	191	..	..	.2	Ci-cu. ....	..	..	..
	8 00	21.9	765.90	30.045	65.4	56.1	103.	.353	(A. 67.1)	71.	270	..	..	.05	Ci-cu., Ci-s. ....	..	..	..
	10 00	22.6	765.70	30.034	69.1	59.1	118.	.366	3 P. M.: (D. 52.)	67.5	230	..	..	..	A little Ci-s. in S. ....	..	..	..
	12 00	23.7	765.00	30.001	72.6	63.5	111.2	.494	(A. 77.5)	64.4	137	..	..	.06	Cu., Ci-s. in S. ....	..	..	..
	14 00	24.8	763.55	29.939	76.5	64.7	112.5	.477	(D. 56.)	63.4	58	..	..	.8	Cu., Ci., Ci-cu., Ci-s. ....	..	112	..
	16 00	26.1	763.80	29.922	78.2	63.9	104.8	.402	9 P. M.: (D. 56.)	61.1	137	..	..	.1	Cu., Ci., Ci-cu., Ci-s. ....	..	..	..
	18 00	25.4	763.15	29.920	75.4	63.8	...	.481	3 A. M.: (D. 56.)	70.2	145	..	..	.6	Ci., Ci-cu., Ci-s. ....	..	135	..
30	20 00	24.8	763.00	29.917	67.9	62.4	...	.504	(A. 64.9)	84.8	147	..	..	.9	Ci., Ci-cu., Ci-s. ....	..	135	..
	22 00	23.7	762.45	29.904	63.	59.8	...	.484	3 A. M.: (D. 56.)	88.7	56	..	..	1.0	Ci., Ci-cu., Ci-s. ....	..	135	..
	0 00	23.	762.45	29.904	60.7	58.2	...	.465	(D. 56.)	89.9	56	..	..	.8	Ci-cu., Ci-s.	112	..	90
	2 00	22.7	761.60	29.872	60.7	58.2	...	.485	(A. 60.6)	89.9	56	..	..	.7	Ci-cu., Ci-s. ....	..	135	90
	4 00	22.2	761.30	29.862	60.6	58.8	...	.483	9 A. M.: (D. 64.)	89.5	334	..	..	.9	Ci-cu., Ci-s. ....	..	..	67
	6 00	21.5	761.10	29.859	64.6	62.	...	.539	(D. 64.)	84.	330	..	..	.9	Cu., Cu-s., Ci-s. ....	..	0	315
	8 00	22.8	761.20	29.856	73.5	68.7	...	.642	(A. 77.)	84.	330	..	..	.6	Cu., Cu-s., Ci-s. ....	..	315	90
	10 00	24.2	760.90	29.838	78.	69.	...	.605	3 P. M.: (D. 64.5)	70.	0	.4	..	.7	Cu., Cu-s., Ci-s. ....	..	0	0
	12 00	26.	760.50	29.813	82.3	71.1	...	.631	9 P. M.: (D. 74.3)	90.	250	2.0	..	1.0	Cu-s., N., showery. ....	..	..	0
	14 00	25.5	760.60	29.819	71.	68.7	...	.671	(A. 68.3)	84.	348	7	.015	1.0	Cu-s., N. ....	..	..	0
31	16 00	25.2	760.00	29.797	73.8	69.	...	.649	9 P. M.: (D. 64.)	89.	325	2	..	1.0	Cu-s., N., showery. ....	..	..	0
	18 00	24.7	759.75	29.790	71.5	68.8	...	.668	(D. 64.)	89.2	335	..	..	.045	Cu-s., N., showery. ....	..	..	..
	20 00	24.1	759.20	29.770	69.	67.636	(A. 68.3)	92.	300	1.0	Cu-s., N., showery.
	22 00	23.6	759.50	29.783	67.8	65.585		92.	300440	Cu-s., N., showery.

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[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

June.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Beaumure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
18	4	23.5	758.45	29.744	66.5	65.1	...	.603	3 A. M.: (D. 62.3)	92.3	233	..	.45	1.0	Cu-s., N., raining.	..	..	..
	8	23.0	757.00	29.690	65.1	64.5	...	.600	(A. 66.6)	92.3	261	1.0	.04	1.0	Cu-s., N., raining.	..	315	..
	12	22.7	755.85	29.646	66.	65.	...	.606	9 A. M.: (D. 63.)	91.8	245	.8	.13	1.0	Cu-s., N., raining.	..	..	..
	6	22.4	756.00	29.652	66.5	66.1	...	.636	(A. 67.1)	92.5	256	.6	.485	1.0	Cu-s., N., raining.	..	..	..
	10	22.1	757.00	29.694	66.6	65.6	...	.619	(D. 63.)	91.8	245	.9	.175	1.0	Cu-s., N., raining.	..	22	..
	14	22.3	756.00	29.652	67.6	66.6	...	.640	(A. 67.1)	91.8	250	.5	.09	1.0	Cu-s., N., raining.	..	270	..
	18	22.3	756.20	29.660	67.	65.	...	.595	3 P. M.: (D. 61.)	90.5	245	1.2	.02	1.0	Cu-s., N.	..	..	..
	22	22.2	756.25	29.663	65.5	63.8	...	.574	(A. 64.5)	90.5	260	1.2	..	1.0	Cu-s., N.	..	..	..
	2	22.	756.70	29.683	63.5	62.	...	.542	(A. 64.5)	90.5	246	.6	..	1.0	Cu-s., N.	..	..	..
	6	21.5	757.40	29.714	61.4	60.5	...	.522	9 P. M.: (D. 58.3)	90.5	205	.5	.015	1.0	Cu-s., N.	..	..	..
	10	21.	758.28	29.748	60.1	59.4	...	.505	(A. 60.)	91.	220	.4	.025	1.0	N., drizzling rain	..	..	..
	14	20.6	758.60	29.764	60.3	59.4	...	.503		92.	210	..	.01	1.0	N., Cu-s.	..	..	..

[1841,

DAILY METEOROLOGICAL OBSERVATIONS.

August.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, lbs.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature.	Obs'd height.	millimetres.	Corr. height.	inches.	Dry.	Wet.	Radiation.		Dir., degrees.	Force, lbs.				1.	2.	3.
2	0 00	21.	765.95	30.051	62.6	60.1	61.3	.497	3 A. M.: (D. 57.)	85.6	147	..	..	..	Clear.....	..	..	..
	2 00	20.4	766.10	30.081	62.	59.9	60.1	.495	(A. 61.8)	88.5	156	..	..	..	Clear.....	..	..	..
	4 00	19.9	766.85	30.092	61.1	58.6	59.5	.471	9 A. M.: (D. 61.)	86.2	155	..	..	..	Clear.....	..	..	..
	6 00	20.1	767.30	30.109	63.1	60.6	..	.517	(D. 61.)	81.	160	..	..	..	Clear.....	..	..	..
	8 00	20.7	767.90	30.129	68.8	64.2	116.3	.549	(D. 61.)	75.3	140	..	..	..	Clear.....	..	..	..
	10 00	22.2	768.30	30.138	73.2	66.5	117.	.572	(D. 61.)	72.	290	..	..	..	Clear.....	..	..	..
	12 00	24.2	768.60	30.141	77.4	69.4	..	.622	(D. 61.)	68.5	280	..	..	..	Clear.....	..	..	..
	14 00	24.7	768.60	30.139	79.	71.	..	.660	(D. 61.)	68.2	265	..	..	..	Clear.....	..	..	..
	16 00	26.	768.40	30.121	78.9	70.	..	.628	(D. 61.)	71.5	273	..	..	..	Clear.....	..	..	..
	18 00	26.	768.65	30.134	77.	71.	..	.683	(D. 61.)	84.1	27	..	..	..	Clear.....	..	..	..
3	0 00	24.7	769.35	30.168	70.7	67.5	..	.634	(D. 61.)	89.9	24	..	..	..	Clear.....	..	..	..
	2 00	24.1	769.50	30.176	66.4	64.5	62.	.585	(D. 61.)	89.9	24	..	..	..	Clear.....	..	..	..
	4 00	23.	769.60	30.184	63.6	62.2	59.3	.547	(D. 61.)	91.	26	..	..	..	Clear.....	..	..	..
	6 00	22.1	769.25	30.175	63.3	61.2	56.8	.531	(D. 61.)	92.4	26	..	..	..	Clear.....	..	..	..
	8 00	21.	769.30	30.181	61.4	61.	57.	.536	(D. 61.)	92.	147	..	..	..	Clear.....	..	..	..
	10 00	20.3	769.60	30.197	63.	61.6	..	.536	(D. 61.)	89.9	149	..	..	..	Clear.....	..	..	..
	12 00	22.	770.20	30.212	70.1	65.9	114.5	.587	(D. 61.)	81.	140	..	..	..	Clear.....	..	..	..
	14 00	23.6	770.20	30.204	75.	66.3	121.2	.547	(D. 61.)	81.	140	..	..	..	Clear.....	..	..	..
	16 00	25.4	770.00	30.189	77.5	68.	129.2	.675	(D. 61.)	65.5	275	..	..	..	Clear.....	..	..	..
	18 00	26.	769.25	30.155	80.2	69.7	129.2	.602	(D. 61.)	67.	280	..	..	..	Clear.....	..	..	..
3	0 00	27.5	768.85	30.139	80.	71.5	123.9	.668	(D. 61.)	64.1	242	..	..	..	Clear.....	..	..	..
	2 00	26.1	769.00	30.145	73.4	70.	..	.743	(D. 61.)	83.2	32	..	..	..	Clear.....	..	..	..
	4 00	25.8	768.40	30.123	68.	66.	61.5	.615	(D. 61.)	88.4	37	..	..	..	Clear.....	..	..	..
	6 00	25.8	768.40	30.123	68.	66.	61.5	.615	(D. 61.)	88.4	37	Clear.....

Aveser.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

[97]

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Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Beaumore's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
4	h. va.																	
	0 00	25.4	768.60	30.137	67.7	65.9	.64.	.616	3 A. M.: (D. 62.3)	90.	54			.4	Cu., Ci s.			
	2 00	24.5	767.85	30.110	67.4	64.	...	.558	(A. 67.2)	90.5	54			.9	Ci-s., Ci cu.			
	4 00	23.8	767.40	30.094	65.5	65.2	...	.618		89.5	53			.8	Ci-s., Ci-cu., S.			
	6 00	23.6	767.60	30.107	66.6	65.9	...	.629	9 A. M.: (D. 64.5)	91.5	53			1.0	Ci-s., Ci-cu., Ci.			
	8 00	23.6	767.60	30.104	70.6	68.6	...	.672		83.	30			.8	Ci-s., Ci-cu.			
	10 00	25.	767.50	30.093	73.7	70.2	118.	.692	(A. 72.2)	79.	30			.4	Ci., Cu., Ci-cu., Ci-s.			
	12 00	27.	767.00	30.064	81.	71.5	119.	.855	3 P. M.: (D. 65.)	72.	20			.6	Ci., Cu., Ci-cu., Ci-s.			
	14 00	28.	766.00	30.020	84.1	75.	116.5	.754	(A. 83.3)	71.	20			.5	Ci., Cu., Ci-s.			
	16 00	29.1	765.15	29.980	85.	74.5	112.	.724		69.	52			.1	Ci., Cu., Ci-s.			
	18 00	29.1	764.75	29.965	82.8	73.5	...	.712	9 P. M.: (D. 70.5)	71.	48			.3	Ci., Cu., Ci-s., Ci cu.			
	20 00	27.1	765.00	29.963	76.8	72.7	...	.746		86.	27			1.0	Cu., Cu-s.			
5	22 00	26.7	764.80	29.979	75.	72.5	...	.760	(A. 75.4)	88.	115			1.0	Cu-s., N.			
	0 00	26.4	764.15	29.955	74.6	72.8	...	.778	3 A. M.: (D. 67.5)	87.9	1			1.0	Ci-s., N.		22	
	2 00	26.2	763.30	29.921	72.9	72.6	...	.783	(D. 67.5)	88.	32			1.0	Cu-s., N., showery.		0	
	4 00	26.1	763.85	29.944	72.8	72.1	...	.770	(A. 74.1)	87.8	70			1.0	Ci., S., Ci-cu., N.		0	
	6 00	25.	763.00	29.915	72.2	70.5	...	.720	9 A. M.: (D. 71.)	89.	175			1.0	Ci-s., Cu-s., N., rain.		0	
	8 00	25.2	762.90	29.911	74.	73.	...	.790		89.5	310			1.0	Ci-s., Cu-s., N., rain.		0	
	10 00	25.6	762.90	29.909	75.2	73.5	...	.795	(A. 74.6)	89.	315			1.0	Cu., Cu-s., Ci s., N., rain		0	
	12 00	25.5	762.50	29.893	75.1	73.5	...	.796	3 P. M.: (D. 71.5)	90.5	15			1.0	Cu-s., N., rain.		225	
	14 00	25.8	761.90	29.869	75.2	73.5	...	.795	(A. 74.9)	91.	15			1.0	Cu., Cu-s., N.		45	
	16 00	25.	761.35	29.851	73.5	72.	...	.758		91.	350			1.0	Cu., Cu-s., N., rain.			
	18 00	24.8	761.20	29.847	72.4	70.9	...	.731	9 P. M.: (D. 64.5)	92.	280			1.0	Cu., Cu s., N.			
	20 00	24.2	761.55	29.863	68.7	65.	...	.598		91.	136			1.0	Cu., Cu s., N.			
	22 00	23.4	761.45	29.863	66.9	65.6	...	.615	(A. 66.8)	90.7				1.0	Cu-s., N.		225	

August.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Date.		Barometer.				Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Saunssure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.			
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.					Dir., degrees.	Force, lbs.					1.	2.	3.
6	h.	m.																		
	0	00	760.55	29.832	66.2	65.	...	...	.603	3 A. M.: 88.8	150	...	...	...	...	.6	Ci., Ci-cu., Ci s.	...	337	...
	2	00	760.70	29.837	65.	64.	...	...	.586	(D. 57.8) 89.1	180	...	...	...	...	...	Clear.	...	180	...
	4	00	760.60	29.837	65.	63.2	61.2	...	.562	(A. 64.9) 88.9	105	...	...	...	...	.3	Ci., S., Ci-cu.	...	180	...
	6	00	760.80	29.846	65.6	64.4	...	...	.591	9 A. M.: 88.7	163	...	...	...	...	.3	Ci., Ci-s.	270	180	...
	8	00	761.69	29.872	70.7	67.	109.	...	.617	(D. 68.) 86.3	180	...	...	...	...	.1	Cu., Ci-s.	...	225	...
	10	00	761.80	29.872	75.	69.	109.	...	.636	(A. 73.1) 80.5	180	...	...	...	...	.3	Cu., Ci s.	...	202	...
	12	00	761.90	29.868	78.7	70.	117.	...	.631	3 P. M.: 73.4	180	...	...	...	...	.5	Cu.	...	90	...
	14	00	761.90	29.867	79.8	69.	115.	...	.585	(D. 57.) 69.	190	...	...	...	...	.4	Ci., Cu.	225	90	...
	16	00	762.00	29.865	81.	68.	110.2	...	.538	(A. 80.5) 61.8	180	...	...	...	...	.1	Ci-cu., Cu.	...	90	...
	18	00	762.15	29.871	78.5	68.5	...	...	.582	9 P. M.: 69.	180	...	...	...	...	.6	Ci-cu., Cu.	...	...	...
7	20	00	762.35	29.884	73.	67.	...	...	.591	(D. 64.5) 78.	180	...	...	...	...	...	Clear.	...	...	...
	22	00	762.65	29.902	68.5	65.4	62.5	...	.590	(A. 68.5) 86.	180	...	...	...	...	...	Clear.	...	...	...
	0	00	762.60	29.903	66.6	63.5	60.	...	.553	3 A. M.: 88.	176	...	...	...	...	...	Clear.	...	...	...
	2	00	762.35	29.895	65.1	61.1	60.	...	.499	(D. 57.2) 84.6	176	...	...	...	...	...	Clear.	...	...	...
	4	00	762.50	29.906	64.6	60.2	59.	...	.477	(A. 64.2) 85.	176	...	...	...	...	.3	S., Ci-cu.	...	180	...
	6	00	763.55	29.947	64.9	61.	...	...	.497	9 A. M.: 84.	170	...	...	...	...	.3	Ci.	...	...	...
	8	00	763.90	29.959	71.3	64.	105.	...	.514	(D. 57.5) 77.	200	...	...	...	...	.1	Cu., Ci-s.	...	...	...
	10	00	764.15	29.963	76.5	65.5	123.	...	.503	(A. 74.) 70.	260	...	...	...	...	...	Cu., Ci-s.	...	90	...
	12	00	764.00	29.952	79.2	66.2	125.	...	.494	3 P. M.: 63.5	260	...	...	...	...	.2	Cu., Cu-s., Ci-s.	...	90	...
	14	00	763.90	29.945	80.8	65.2	125.5	...	.446	(D. 61.6) 60.	120	...	...	...	...	.3	Cu., Cu-s., Ci-s.	...	90	...
	16	00	763.55	29.925	81.7	67.4	...	...	.508	(A. 81.5) 61.	91	...	...	...	...	.2	Cu., Cu s., Ci-s.	...	90	...
18	00	763.65	29.927	80.1	69.5	...	...	.598	9 P. M.: 66.8	15	...	...	...	...	...	Clear, S. in Hor.	...	...	...
20	00	27.7	764.00	29.942	71.5	65.6	...	.563	(D. 68.5) 78.3	235	...	...	...	...	...	Clear.	...	...	...
22	00	26.5	764.50	29.969	69.5	67.1	68.	.634	(A. 71.) 90.5	3	Ci-cu. in E.	

August.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
9	A. m.																	
	0 00	24.9	763.75	29.945	70.6	68.	...	.651	3 A. M.: (D. 64.2)	88.	348	...	...	1.0	Ci s, Cu-s, Ci-cu	...	...	...
	2 00	24.7	762.85	29.912	70.6	69.	...	.686	(A. 71.)	89.8	16	...	...	1.0	Ci-s, Cu-s, N	...	0	...
	4 00	24.6	762.30	29.890	71.5	70.	...	.710	9 A. M.: (A. 71.)	89.	15	5	...	1.0	Ci-s, Cu-s, N	...	...	...
	6 00	24.5	762.50	29.899	71.5	70.	...	.710	9 A. M.: (A. 71.)	88.9	24	1.5	...	1.0	Cu-s, N, rain	...	...	...
	8 00	24.	762.85	29.914	72.	70.8	...	.732	(D. 70.)	90.6	40	7	0	1.0	Cu-s, N	...	...	...
	10 00	24.7	763.10	29.921	74.	71.7	...	.742	(A. 72.6)	89.7	40	9	...	1.0	Cu-s, N	...	...	...
	12 00	25.8	763.00	29.911	77.8	73.6	...	.768	3 P. M.: (D. 70.5)	85.5	50	1.0	...	1.0	Cu, Cu-s	...	...	...
	14 00	27.3	762.80	29.897	81.4	75.5	...	.801	(D. 70.5)	82.	35	8	...	1.0	Cu, Ci-s, Ci-cu	45	90	...
	16 00	28.3	762.65	29.886	82.5	75.6	...	.795	(A. 82.7)	79.8	30	6	...	1.0	Cu, Ci-s, Ci-cu	45	90	...
	18 00	28.	762.95	29.900	79.8	75.3	...	.811	9 P. M.: (A. 82.7)	81.8	1	...	...	1.0	Cu, Cu-s, Ci-s	90	0	...
	20 00	27.6	763.70	29.931	76.9	74.5	...	.813	(D. 70.?)	91.5	10	...	...	3	Cu-s, Ci-s	...	...	...
10	22 00	27.4	765.20	29.990	75.2	74.5	...	.832	(A. 75.9)	92.7	25	...	...	1.0	Cu-s in S. Hor.	...	...	...
	0 00	27.	765.00	29.985	74.9	74.7	...	.844	3 A. M.: (A. 75.9)	91.	54	...	...	1.0	Cu-s, N	...	0	...
	2 00	26.1	764.70	29.978	71.5	71.2	...	.753	(D. 68.6)	89.6	141	...	...	1.0	Ci, Ci-cu, Ci-s	...	...	...
	4 00	25.7	765.20	29.999	71.1	70.	...	.715	(A. 71.3)	90.8	141	...	...	1.0	Ci-cu, Cu-s, N	...	...	...
	6 00	25.4	765.60	30.016	71.2	70.5	...	.731	9 A. M.: (A. 71.3)	91.4	162	...	...	1.0	Ci-cu, Cu-s, N	...	...	...
	8 00	26.	766.00	30.029	75.2	74.	...	.813	(D. 73.)	90.	240	...	...	1.0	Cu, Cu-s, Ci-s, S	45	45	...
	10 00	26.3	765.90	30.024	77.1	75.5	...	.850	(A. 76.)	80.	335	...	...	1.0	Cu, Cu-s, Ci-s, S	337	45	...
	12 00	27.3	765.30	29.995	81.4	76.6	...	.844	3 P. M.: (A. 76.)	85.	232	...	...	1.0	Ci, Cu, Cu-s, Ci-s	0	90	...
	14 00	27.1	764.50	29.967	76.9	74.7	...	.821	(D. 71.5)	90.5	0	1	15.1.0	1.0	Cu, Ci cu, Cu-s	225	180	45
	16 00	27.8	764.00	29.942	79.3	75.1	...	.809	(A. 79.8)	87.	280	...	...	1.0	Cu, Ci-cu, Cu-s, Ci	...	...	...
	18 00	27.3	764.50	29.964	75.2	73.5	...	.795	9 P. M.: (A. 79.8)	93.	283	...	...	0.31.0	N., Thermometers rain	...	...	...
	20 00	26.9	764.30	29.958	72.5	71.5	...	.752	(D. 70.)	83.5	15	...	2.221.0	1.0	N., rain	...	...	...
	22 00	26.	763.80	29.942	71.4	70.4	...	.725	(A. 72.2)	91.6	180	...	1.351.0	1.0	N., rain	...	...	...

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind. Dir., degrees. Force, lbs.	Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.								1.	2.	3.
11	0 00	26.1	763.15	29.916	72.2	71.6	...	.759	3 A. M.: (D. 68.8)	92.	28	.491.0	N, rain.	...	...	...	...
	2 00	25.6	762.60	29.896	73.2	72.4	...	.777	(A. 73.1)	92.2	57	.221.0	Cu-s, N, showery.	...	...	...	...
	4 00	25.6	763.00	29.912	72.9	72.7	...	.791		92.5	57	.071.0	Cu-s, N, showery.	...	...	337	...
	6 00	25.7	763.60	29.936	73.	72.6	...	.782	9 A. M.: (D. 72.3)	91.5	57	.081.0	Cu-s, N, showery.	...	...	22	...
	8 00	25.1	763.75	29.945	73.5	73.	...	.795		88.5	75	.011.0	Cu-s, N, showery.	...	...	45	...
	10 00	25.6	764.40	29.968	76.	74.5	...	.823	(A. 74.5)	85.5	65	.031.0	Cu-s, N.	...	...	45	...
	12 00	26.3	764.30	29.961	77.8	75.5	...	.842	3 P. M.: (D. 73.8)	86.	60	...	Cu, Ci-cu, Ci-s, Cu-s.	...	...	45	...
	14 00	27.	763.75	29.936	80.8	76.3	...	.839		85.5	20	...	Cu, Ci-cu, Ci-s, Cu-s.	...	...	45	...
	16 00	27.7	763.70	29.930	80.4	75.6	...	.816	(A. 82.2)	86.5	20	...	Cu, Ci-cu, Cu-s, N.	...	45	90	...
	18 00	27.	763.60	29.930	76.4	72.1	...	.729	9 P. M.: (D. 69.8)	86.	90	...	Cu, Ci-cu, Cu-s.	...	90	...	...
	20 00	26.5	764.65	29.975	72.7	71.4	...	.746		91.	25	...	Cu, Cu-s, N.	...	45	...	...
12	22 00	25.1	764.80	29.979	72.5	71.	...	.734	(A. 73.)	93.5	70	...	Cu, Cu-s.	...	17	...	...
	0 00	25.3	764.75	29.984	71.8	70.4	...	.720	3 A. M.: (D. 52.2)	92.	61	...	Ci-cu, Ci-s, N.	...	...	135	...
	2 00	25.	764.80	29.987	71.	62.6	...	.474		74.	135	...	Ci-cu, Ci-s, N.	...	...	180	...
	4 00	24.5	765.00	29.997	68.2	60.	...	.480	(A. 70.)	75.5	160	...	Ci-cu, Ci-s.	...	...	157	...
	6 00	24.	766.15	30.044	66.	61.	...	.484	9 A. M.: (D. 60.)	79.3	145	...	Ci-cu, Ci-s.	...	...	180	...
	8 00	24.	766.70	30.066	68.8	63.	...	.512		79.	145	...	Ci, Ci-cu, Ci-s, Cu-s.	...	...	180	...
	10 00	23.9	766.85	30.072	72.5	65.6	...	.551	(A. 71.5)	77.5	140	...	Cu, Ci-cu, Ci-s.	...	...	180	...
	12 00	24.6	766.35	30.050	74.2	66.5	...	.560	3 P. M.: (D. 63.)	75.	167	...	Cu, Ci-cu, Ci-s.	...	90	45	...
	14 00	25.3	765.70	30.021	75.4	67.5	...	.580	(D. 63.)	75.5	109	...	Cu, Ci-cu, Ci-s.	...	90	90	...
	16 00	25.5	765.30	30.003	76.5	70.	...	.633	(A. 76.)	77.5	80	...	Cu, Ci-cu, Cu-s.	...	45	90	0
	18 00	25.	764.45	29.973	72.9	68.6	...	.646	9 P. M.: (D. 64.2)	83.	49	...	Ci-cu, Cu-s.	...	45	45	...
	20 00	24.	764.75	29.989	70.5	66.7	...	.610		85.2	56	...	Ci-cu, Cu-s, dark.	...	...	...	...
	22 00	23.7	764.80	29.994	69.1	64.9567	(A. 69.8)	88.4	41	...	N, very dark.

August.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Date.		Barometer.				Thermometers, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
13	h.																	
	0	23.2	764.10	29.967	68.	66.1	...	...	3 A. M.: (D. 59.6)	87.9	8	...	...	1.0	Cu-s., N., slight rain...	...	...	...
	2	22.8	763.70	29.954	66.8	64.	...	...	(D. 59.6)	89.3	59	...	...	1.0	Cu-s., N.	...	...	...
	4	22.5	763.15	29.939	65.8	64.9	...	...	(A. 66.5)	87.	59	...	...	.9	Ci-cu., Ci-s., N.	...	...	...
	6	22.2	763.35	29.942	66.	64.1	...	...	9 A. M.: (D. 64.5)	89.6	59	...	...	1.0	Ci., Ci-cu., Ci-s.	...	270	...
	8	22.6	763.60	29.951	69.	66.	...	...	.577	86.4	73	...	...	1.0	Ci., Ci-cu.	...	...	...
	10	23.7	763.75	29.952	74.3	69.	...	...	.604	80.	20	...	...	1.0	Cu., Ci-s., S.	...	...	...
	12	24.7	763.50	29.937	76.6	70.1	...	...	.644	78.	15	...	...	1.0	Cu., Ci-s., S.	...	...	...
	14	25.1	763.30	29.927	76.3	68.	...	...	.655	75.	65	...	...	1.0	Cu., Ci-s.	...	...	...
	16	25.8	762.90	29.908	77.5	71.5	...	...	.590	73.2	57	...	...	1.0	Ci-cu., Ci-s.	...	...	...
	18	25.2	762.95	29.913	73.9	68.5	...	...	.685	80.	42	...	...	1.0	Ci-cu., Ci-s., Cu-s.	...	...	...
	20	24.9	763.65	29.941	70.6	66.7	...	...	.633	86.	30	...	...	.5	Ci-cu., Ci-s.	...	...	...
14	22	23.3	763.60	29.947	68.2	66.	...	...	.609	90.	30	...	...	.1	Ci-cu., Ci-s.	...	...	...
	0	24.2	763.70	29.947	65.9	65.	...	...	.613	93.4	28	...	...	.07	Ci-cu.	...	0	...
	2	23.6	763.30	29.934	65.1	64.2	...	...	.607	93.9	154	...	...	.8	Ci-cu., Ci-s., N.	...	135	...
	4	23.4	763.55	29.945	64.6	63.2	...	...	.591	92.3	154	...	...	.9	Ci-cu., Ci-s.	...	...	...
	6	22.7	764.00	29.966	64.8	64.5	...	...	.566	93.4	154	...	...	1.0	Ci., Ci-s., Ci-cu.	...	157	...
	8	22.1	764.20	29.977	66.7	66.6	...	...	.604	88.5	165	...	...	1.0	Ci., Ci-s., Ci-cu.	...	135	...
	10	23.9	765.00	29.999	74.	69.4	...	...	.627	84.	255	...	...	.8	Ci., Cu., Ci-cu., Ci-s.	...	90	...
	12	25.1	765.50	30.014	77.3	69.1	...	...	.661	76.	260	...	...	.7	Ci., Cu., Ci-cu., Ci-s.	...	225	90
	14	25.9	765.40	30.006	78.5	68.7	...	...	.613	75.8	270	...	...	1.0	Ci., Cu., Ci-cu., Ci-s.	...	270	45
	16	26.9	765.50	30.005	79.8	69.5	...	...	.585	74.1	360	...	...	1.0	Ci., Cu., Ci-cu., Ci-s.	...	225	...
	18	26.9	766.00	30.025	77.4	69.5	...	...	.625	74.7	293	...	...	1.0	Cu.	...	...	...
	20	25.3	766.80	30.065	70.8	66.6	...	...	.603	82.	255	...	...	...	Ci., S., Ci-s.	...	...	...
22	23.5	767.30	30.092	68.3	66.3	...	...	.621	92.	250	...	...	...	Clear	...	...	...

Day.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
16	h. m.																	
	0 00	23.9	771.70	30.262	63.	61.6	61.	.586	3 A. M.:	89.6	218	..	..	..	Clear .....	..	..	..
	2 00	23.	771.25	30.249	62.3	60.9	59.6	.623	(D. 51.3)	90.	218	..	..	..	Clear .....	..	..	..
	4 00	22.4	770.60	30.225	60.8	59.	57.	.486	(A. 61.7)	90.5	224	..	..	..	Clear .....	..	..	..
	6 00	21.7	771.20	30.254	61.	59.7	....	.508	9 A. M.:	90.7	202	..	..	.7	Cl., Ci-cu., Ci-s.....	..	..	..
	8 00	22.	771.40	30.260	67.4	63.1	....	.590	(D. 59.4)	84.	215	..	..	.1	Clear, exc. a slight haze.	..	..	..
	10 00	23.	771.55	30.261	71.3	65.	111.	.548	(A. 69.7)	79.5	280	..	..	.2	Cu., hazy .....	..	270	..
	12 00	24.3	770.75	30.222	74.5	67.5	113.	.592	3 P. M.:	76.	220	..	..	.4	Cu., hazy .....	..	270	..
	14 00	25.	770.00	30.189	76.	68.3	118.	.603	(D. 62.3)	75.3	240	..	..	..	Cu., hazy .....	..	270	..
	16 00	26.1	769.50	30.165	76.7	67.7	....	.573	(A. 76.7)	73.	250	..	..	..	Cu., hazy .....	..	270	..
	18 00	26.	768.90	30.142	75.4	68.3	....	.606	9 P. M.:	75.	250	..	..	..	S.....	..	..	..
17	20 00	25.7	768.95	30.146	68.	62.5	52.7	.504	(D. 57.3)	78.	0	..	..	..	Clear .....	..	..	..
	22 00	24.2	768.80	30.147	64.2	60.4	59.6	.486	(A. 66.)	83.	14	..	..	..	Clear .....	..	..	..
	0 00	23.1	768.15	30.129	62.1	60.1	57.2	.502	3 A. M.:	87.9	30	..	..	..	Clear .....	..	..	..
	2 00	21.5	767.85	30.125	59.8	58.3	56.7	.477	(D. 57.4)	91.3	106	..	..	..	Clear .....	..	..	..
	4 00	20.9	767.35	30.107	59.	58.7	56.	.498	(A. 59.2)	92.1	106	..	..	..	Clear .....	..	..	..
	6 00	20.6	767.35	30.108	60.8	60.7	....	.536	9 A. M.:	91.4	107	..	..	..	A few Ci-s in NE.....	..	..	..
	8 00	21.2	767.30	30.100	66.7	65.	102.6	.598	(D. 60.)	86.	155	..	..	..	Clear, slight haze .....	..	..	..
	10 00	23.3	767.00	30.081	72.	68.2	120.	.643	(A. 68.6)	78.	135	..	..	..	A few detached Cu. in S.	..	..	..
	12 00	25.	766.50	30.064	77.4	69.	128.	.608	3 P. M.:	73.6	85	..	..	.3	Cu., S.....	..	270	..
	14 00	25.8	765.80	30.022	79.	69.2	120.	.596	(D. 67.8)	73.5	70	..	..	.3	Cu., S.....	..	..	..
	16 00	27.1	765.50	30.005	80.	70.7	111.	.638	(A. 80.7)	71.	55	..	..	..	Cu.....	..	..	..
	18 00	27.	765.25	29.991	78.3	70.2	....	.640	9 P. M.:	73.	100	..	..	..	Ci-s.....	..	..	..
	20 00	26.2	765.50	30.009	70.4	67.3	64.7	.631	(D. 62.3)	86.5	16	..	..	..	Clear .....	..	..	..
	22 00	24.1	765.40	30.014	67.9	65.	62.8	.584	(A. 70.4)	87.	43	Clear

August.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Date.	Hour.	Barometer.			Thermometers, Fahr.			Force of vapor, ins.	Dew point, Fahr.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
18	18	24.4	765.35	30.011	66.	64.	61.2	.574	3 A. M.:	90.9	67	..	..	..	Clear .....	..	..	..
	0	23.7	764.70	29.989	62.2	61.3	57.	.536	(D. 57.5)	89.	67	..	..	..	Clear .....	..	..	..
	2	22.4	764.30	29.979	60.8	58.6	54.8	..	(A. 61.5)	91.9	102	..	..	..	Ci, Ci cu, S .....	..	180	..
	4	21.8	765.00	30.010	61.6	61.	..	.534	9 A. M.:	93.2	103	..	..	.4	Ci, Ci s .....	..	45	..
	6	22.2	765.10	30.011	69.	68.5	114.	.620	(D. 63.)	87.	90	..	..	.6	Ci, Ci cu, Ci s .....	..	315	..
	8	23.7	765.50	30.021	73.9	68.8	115.	.641	(A. 71.4)	80.5	96	..	..	.6	Ci, Ci cu, Ci s, Cu ..	..	315	..
	10	25.2	765.00	29.993	77.5	69.8	118.	.634	3 P. M.:	74.5	18	..	..	.4	Ci, Ci cu, Ci s, Cu ..	..	315	..
	12	26.4	764.40	29.965	78.6	70.8	..	.653	(D. 64.5)	73.3	5	..	..	.3	Cu., Ci cu. Ci s .....	..	315	..
	14	27.1	763.75	29.936	79.5	71.	..	.657	(A. 79.5)	72.	74	..	..	.6	Ci cu, Ci s .....	..	..	..
	16	27.	763.40	29.922	77.8	70.7	..	.666	9 P. M.:	74.	115	..	..	.1	Ci, Ci cu, Ci s, S ..	..	..	..
19	18	26.	763.80	29.942	70.8	68.4	64.9	.603	(D. 65.5)	88.2	15	..	..	..	Clear .....	..	..	..
	20	25.1	763.90	29.951	67.3	65.5	60.5	.608	(A. 68.3)	93.	15	..	..	..	Clear .....	..	..	..
	22	24.4	763.65	29.944	64.9	63.6	61.2	.574	3 A. M.:	94.3	15	..	..	..	Clear .....	..	..	..
	0	23.7	763.15	29.928	63.1	62.	59.8	.547	(D. 58.3)	94.2	15	..	..	..	Clear .....	..	..	..
	2	22.8	762.40	29.903	61.6	60.4	57.8	.516	(A. 61.4)	94.6	150	..	..	..	Clear, hazy .....	..	..	..
	4	22.1	763.20	29.937	60.6	60.5	..	.531	9 A. M.:	94.	150	..	..	..	Clear, hazy .....	..	..	..
	6	22.7	763.30	29.938	68.5	65.3	114.	.587	(D. 62.6)	86.	150	..	..	..	Clear .....	..	..	..
	8	24.1	763.15	29.925	74.2	65.2	126.	.518	(A. 72.4)	71.	200	..	..	..	Clear .....	..	..	..
	10	25.2	763.00	29.914	77.	67.	126.	.545	3 P. M.:	69.2	55	..	..	..	Clear .....	..	..	..
	12	26.2	762.50	29.891	80.	68.1	120.	.553	(D. 62.)	66.5	160	..	..	..	Clear .....	..	..	..
20	14	27.4	762.30	29.872	81.5	72.	113.7	..	(A. 80.8)	68.5	88	..	..	..	Clear, hazy .....	..	..	..
	16	27.	762.50	29.884	77.5	71.5	..	.699	9 P. M.:	78.5	43	..	..	..	Clear, hazy .....	..	..	..
	18	27.5	763.15	29.912	72.5	69.3	..	.674	(D. 66.5)	87.	43	..	..	..	Clear, hazy .....	..	..	..
	20	26.4	763.70	29.937	71.	68.7	..	.671	(A. 71.4)	91.3	48	..	..	..	Clear, hazy .....	..	..	..

August.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Day.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Bausaure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
20	0	25.5	764.00	29.952	69.1	67.	65.7	.635	3 A. M.: (D. 62.5)	89.5	75	..	..	..	Clear .....	..	..	..
	2	25.2	764.00	29.954	67.6	66.	64.	.630	..	92.8	60	..	..	..	Clear .....	..	..	..
	4	24.6	764.00	29.957	66.1	66.	63.2	.637	9 A. M.: (A. 66.4)	94.	60	..	..	.2	S. in Hor. ....	..	..	..
	6	24.2	764.30	29.971	68.	67.1	....	.651	9 A. M.: (D. 70.)	93.8	60	..	..	.4	Cl-s, light Cl. ....	..	..	..
	8	24.5	764.20	29.966	74.5	72.3	103.5	.758	(A. 77.)	90.	25	..	..	.1	Light Cl. ....	..	..	..
	10	26.1	764.50	29.970	78.5	74.5	123.	.794	..	86.2	45	..	..	.2	Clear .....	..	..	..
	12	28.	764.40	29.957	82.8	77.4	134.2	.863	3 P. M.: (D. 73.5)	83.4	32	..	..	.1	Cu., Cl-s. ....	..	..	..
	14	29.6	764.00	29.934	85.8	78.3	116.	.864	(A. 86.3)	78.5	24	..	..	.2	Cu., Cl-cu., Cu-s., S. ....	..	90	..
	16	30.	763.75	29.921	84.5	77.1	109.9	.832	9 P. M.: (D. 72.2)	79.	45	..	..	.4	Cu., Cl-s., Cu-s. ....	..	45	..
	18	29.8	763.55	29.915	81.4	75.4	....	.797	..	79.2	55	..	..	.6	Cu., Cl-s. Cu. ....	..	0	..
	20	28.2	764.30	29.952	78.3	75.5	....	.836	(D. 77.4)	90.5	40	..	..	.1	Cu-s. in W. ....	..	..	..
	22	28.1	764.35	29.955	76.9	74.5	....	.813	..	91.2	40	..	..	.1	Cu-s. in N. ....	..	..	..
21	0	27.4	764.00	29.943	74.	73.2	71.8	.797	3 A. M.: (D. 70.6)	93.8	43	..	..	.3	Clear .....	..	..	..
	2	27.2	764.15	29.950	72.2	71.6	69.	.759	..	94.	43	..	..	.7	Cl-cu. ....	..	..	..
	4	26.8	764.00	29.947	72.	71.7	69.	.765	(A. 72.8)	93.2	45	..	..	.8	Cl., Cl-s., Cl., Cu. ....	..	..	..
	6	26.4	764.25	29.959	72.6	72.	....	.769	9 A. M.: (D. 72.)	93.7	43	..	..	.1	Cl., Cl-s., Cl., Cu. ....	..	..	..
	8	26.6	764.20	29.956	75.5	73.6	121.5	.794	(D. 72.)	87.5	110	..	..	.5	Cu., Cl-cu., Cl-s., S. ....	..	90	..
	10	28.	764.20	29.949	80.5	76.2	131.5	.838	3 P. M.: (D. 73.3)	82.7	148	..	..	.9	Cl., Cu., Cl-cu., Cu-s., S. ....	..	67	..
	12	29.	763.80	29.928	85.1	78.7	180.	.891	..	81.	0	..	..	.1	Cl., Cu., Cl-s., Cu-s. ....	..	..	..
	14	29.7	762.55	29.876	83.8	77.3	....	.845	(D. 72.3)	81.7	48	..	..	.9	Cu-s. N. ....	..	45	..
	16	29.8	763.10	29.897	79.5	72.7	....	.716	(A. 83.9)	83.	20	..	..	1.0	Cu-s., N., rain. ....	..	45	..
	18	28.3	763.00	29.899	74.5	72.	....	.747	9 P. M.: (D. 70.8)	91.	354	7	.13	1.0	Cu-s., N., rain. ....	..	225	..
	20	27.2	762.55	29.887	73.5	71.4	....	.737	..	93.	235	..	.07	1.0	Cu-s., N., rain. ....	..	337	..
	22	27.3	762.90	29.901	71.9	70.4	....	.719	(A. 72.6)	93.2	355	.2	.19	1.0	Cu-s., N., rain. ....	..	..	..

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

August.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygt., Gauges.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
23	A. M.																	
	0 00	24.3	763.25	29.928	68.6	65.7	...	.599	3 A. M.:	89.4	166	...	.21	.2	Ci-cu.	...	135	...
	2 00	23.5	763.80	29.954	66.2	62.9	61.	.538	(D. 57.6)	83.6	169	...	.02	...	Clear	...	...	...
	4 00	23.1	764.30	29.977	64.7	60.6	60.	.487	(A. 65.6)	82.8	173	...	...	.5	Ci, Ci-cu.	...	...	...
	6 00	22.6	765.40	30.022	64.	59.5	...	.464	9 A. M.:	83.9	190	...	...	.6	Ci, Ci-s.	...	130	...
	8 00	22.8	766.35	30.059	68.6	62.6	...	.502	(D. 57.)	82.4	220	...	...	.8	Ci, Ci-cu.	...	247	...
	10 00	23.7	767.00	30.079	71.	62.6	103.	.474	(A. 69.4)	76.	220	7	...	.3	Cu, Ci, Ci-cu, Ci-s.	...	225	90
	12 00	24.5	767.00	30.075	73.5	65.	110.	.520	3 P. M.:	76.	220	8	...	.5	Cu, Ci-s.	...	225	...
	14 00	25.	767.10	30.076	75.	64.6	...	.492	(D. 59.5)	70.5	220	...	...	.7	Cu, Ci-s, Ci.	...	225	95
	16 00	25.	766.90	30.069	74.8	63.5	106.	.459	(A. 74.5)	67.	263	...	...	.9	Cu, Ci-s, Ci.	...	225	90
	18 00	25.	767.15	30.078	73.2	65.4	...	.536	9 P. M.:	71.	258	...	...	...	Ci, Ci-s.	...	90	...
24	20 00	24.7	768.05	30.115	65.7	63.4	...	.560	(D. 60.5)	87.3	258	...	...	.1	Ci, Ci-s.	...	...	...
	22 00	23.6	768.50	30.138	63.	61.	57.5	.518	(A. 64.5)	91.	343	...	...	...	Ci-s.	...	...	...
	0 00	23.1	768.65	30.147	61.	60.1	52.5	.515	3 A. M.:	93.6	343	...	...	.2	Ci-cu.	...	0	...
	2 00	22.7	768.60	30.146	61.5	59.8	...	.501	(D. 59.4)	91.	173	...	...	.8	Ci-cu.	...	135	...
	4 00	21.9	769.00	30.165	60.9	58.2	...	.462	(A. 62.)	96.	171	...	...	.7	Ci, Cu, Ci-cu.	...	45	...
	6 00	21.2	769.80	30.201	59.8	57.6	...	.458	9 A. M.:	88.9	179	...	...	.9	Ci, Cu, Ci-cu.	...	...	...
	8 00	21.5	770.65	30.233	65.	58.5	...	.424	(D. 56.)	78.	195	...	...	.4	Ci, Ci-s.	...	90	...
	10 00	22.7	771.15	30.246	71.	64.5	111.3	.533	(A. 68.)	77.5	245	...	...	.7	Ci, Ci-s, Cu.	...	90	...
	12 00	23.9	771.00	30.234	73.	64.	118.	.494	3 P. M.:	73.7	260	...	...	.5	Ci, Ci-s, Cu.	...	225	90
	14 00	24.9	770.40	30.205	74.7	62.4	117.	.437	(D. 55.)	65.5	280	...	...	.4	Ci, Ci-s, Cu.	...	270	90
	16 00	25.5	770.45	30.204	75.1	64.7	122.7	.492	(A. 75.2)	66.3	245	...	...	.2	Ci, Ci-s, Cu.	...	235	90
	18 00	25.3	770.65	30.214	72.8	66.5	...	.576	9 P. M.:	73.3	249	...	...	...	Ci, Ci-s, Cu.	...	...	...
	20 00	24.6	771.00	30.231	66.	62.5	59.5	.538	(D. 59.)	83.1	5	...	...	...	S.	...	...	...
	22 00	23.9	770.80	30.226	62.5	60.5	58.3	.509	(A. 64.3)	89.	5	...	...	...	S.	...	...	...

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

August.]

Date.	Hour.	Barometer.			Thermometers, Fahr.			Dew point, Fahr.	Hygr., Beaumore's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
25	0 00	23.	770.65	30.225	61.	59.4	57.2	.495	93.8	7	..	..	.2	Ci-cu., Ci-s.	..	0	..
	2 00	22.2	770.30	30.214	58.8	57.1	56.	.456	93.4	190	..	..	.2	Clear.	..	180	..
	4 00	21.4	770.25	30.217	58.2	57.	54.2	.459	93.2	190	..	..	.4	Ci., Cu., Ci-s., S.	..	..	..
	6 00	20.8	770.50	30.230	57.6	56.7	..	.459	93.8	189	..	..	.4	Ci., Ci-s., S.	..	..	..
	8 00	21.7	770.40	30.222	66.5	63.	104.	.538	85.	160	..	..	.2	Ci., Ci-cu., Ci-s.	..	90	..
	10 00	23.	770.20	30.207	71.3	64.3	118.5	.523	76.2	118	..	..	.6	Cu., Ci-cu., Ci-s.	..	..	..
	12 00	24.3	769.80	30.185	73.8	63.8	116.	.479	69.	270	..	..	.7	Cu., Ci., Ci-s.	..	270	90
	14 00	24.8	769.10	30.156	75.2	64.7	115.	.491	68.	240	..	..	.6	Ci., Cu., Ci-s.	..	270	90
	16 00	25.6	768.50	30.126	76.2	66.3	117.2	.531	67.6	90	..	..	.1	Ci., Cu., Ci-s.	..	270	90
	18 00	25.6	768.05	30.110	73.5	67.4	..	.598	73.	64	..	..	.8	Ci., Cu., Ci-s.	..	..	..
	20 00	24.7	768.15	30.119	66.7	63.5	63.	.552	86.	16	..	..	.3	Ci., (Ci-s.) halo.	..	..	..
	22 00	21.8	768.60	30.153	63.5	61.	..	.513	88.	14	..	..	.3	Ci., Ci-s., halo.	..	..	..
26	0 00	22.4	767.00	30.084	61.3	59.1	56.8	.483	90.8	13	..	..	.6	Ci-s., Ci-cu.	..	..	..
	2 00	21.4	766.40	30.067	59.	58.	53.9	.478	92.	14	..	..	.2	Ci-s., Ci-cu.	..	..	..
	4 00	21.3	765.75	30.042	57.6	56.	..	.440	94.2	15	..	..	.6	Ci-s., Ci-cu., Ci.	..	..	..
	6 00	20.7	766.00	30.055	58.5	57.6	..	.473	94.6	235	..	..	1.0	Ci-s., Ci-cu., Cu-s. (?)	..	..	..
	8 00	20.7	765.70	30.043	65.6	62.5	..	.533	86.	240	..	..	.8	Ci., Ci-cu.	..	90	..
	10 00	21.6	765.40	30.026	69.5	63.8	..	.528	73.	290	..	..	1.0	Ci-cu., Ci-s.	..	..	..
	12 00	22.1	765.30	30.018	69.4	63.4	..	.518	78.	0	..	..	1.0	Cu., Ci-s.	..	..	..
	14 00	22.2	764.25	29.977	70.2	65.3	..	.567	81.6	280	..	..	1.0	Cu., Ci-s., N., slight rain	..	..	..
	16 00	22.5	764.25	29.976	68.5	65.3	..	.587	86.5	315	..	..	1.0	Cu., Ci-s., N., slight rain	..	..	..
	18 00	22.2	762.70	29.916	67.4	64.5	..	.574	87.	290	..	..	1.0	Ci-s., N.	..	..	..
	20 00	22.	763.40	29.906	67.	64.	..	.563	86.1	260	..	..	1.0	Ci-s., N., rain.	..	..	..
	22 00	21.8	761.70	29.880	65.	64.1	..	.589	92.	257	..	.29	1.0	N., rain.

August.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

[97]

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Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gausse's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
27	0 00	21.8	761.65	29.880	64.4	64.	...	.592	3 A. M.:	91.	287	...	.23	1.0	Ci-s., Cu-s., rain.	...	...	...
	2 00	21.2	760.85	29.861	65.6	64.6	...	.598	(D. 64.3)	91.3	234	...	.08	1.0	N., Cu-s., rain.	...	...	...
	4 00	21.2	760.70	29.845	66.4	65.5	...	.618	(A. 66.2)	91.4	233	...	.06	1.0	Cu-s., rain.	...	...	...
	6 00	21.4	761.25	29.865	65.9	65.6	...	.637	9 A. M.:	92.2	192	...	.02	1.0	N., Cu-s., rain.	...	...	...
	8 00	21.1	761.50	29.876	67.	66.3	...	.636	(D. 66.5)	92.5	155	...	.01	1.0	Dense fog, slight rain.	...	...	...
	10 00	21.8	761.70	29.881	71.6	70.	...	.709	(A. 67.6)	89.4	145	...	...	1.0	Ci-s., S.	...	...	...
	12 00	22.8	761.86	29.882	74.7	71.3	...	.719	3 P. M.:	86.	108	...	...	1.0	Cu., Ci-s.	...	...	...
	14 00	24.	761.70	29.869	77.	73.4	...	.734	(D. 67.5)	82.5	112	...	...	1.0	Ci., Cu.	...	45	...
	16 00	25.	761.75	29.867	78.	71.6	...	.716	(A. 77.8)	85.	110	...	...	1.0	Cu., Ci-cu., N.	...	67	...
	18 00	25.2	762.05	29.877	75.4	71.8	...	.729	...	86.	172	...	...	1.0	Cu., Ci., N.	...	67	...
	20 00	25.1	763.20	29.922	73.8	71.2	...	.736	...	89.	171	...	...	1.0	Cu., N.	...	...	...
28	22 00	25.1	763.10	29.918	72.5	71.	...	.734	...	91.	220	...	...	1.0	Ci-s., N.	...	...	...
	0 00	25.4	763.50	29.933	71.5	70.2	...	.717	...	93.	191	...	...	1.0	Ci., Ci-s., N., slight rain	...	...	...
	2 00	25.2	763.15	29.920	71.	69.7	...	.705	...	92.	207	...	...	1.0	Ci-cu., Cu-s., (?) N.	...	...	...
	4 00	25.	762.85	29.910	70.8	70.	...	.718	...	93.	236	...	...	1.0	Ci-s., Cu-s., (?)	...	...	...
	6 00	25.	763.80	29.947	71.5	71.	...	.745	9 A. M.:	92.5	285	...	...	1.0	Ci-s., S.	...	270	...
	8 00	25.	764.00	29.955	73.	71.7	...	.753	(D. 70.5)	92.	300	...	...	1.0	Ci-s., S., N. (?)	...	270	...
	10 00	25.	764.20	29.963	74.7	73.2	...	.769	(A. 74.5)	91.	285	...	.03	1.0	Ci-s., S., N., rain.	...	270	...
	12 00	26.5	764.15	29.958	77.	73.9	...	.789	3 P. M.:	90.4	268	...	.04	.95	Ci-s., S., N., rain.	...	270	...
	14 00	26.	763.70	29.938	75.5	74.	...	.810	(D. 72.8)	90.3	290	1.1	.03	1.0	N., rain.	...	337	...
	16 00	25.9	763.95	29.949	74.5	73.	...	.784	(A. 75.3)	91.2	250	...	.40	1.0	N., rain.	...	337	...
	18 00	26.	764.35	29.964	74.5	72.8	...	.777	9 P. M.:	92.5	265	...	.01	1.0	N., (?) Ci-s.	...	270	...
	20 00	25.5	764.80	29.984	73.6	72.6	...	.750	(D. 71.5)	91.5	265	...	...	1.0	N., Ci-s.	...	...	...
	22 00	25.3	765.00	29.993	73.1	72.4	...	.778	(A. 73.5)	92.	265	...	...	1.0	Ci-s., S., N. (?)	...	315	...

[1941.]

DAILY METEOROLOGICAL OBSERVATIONS.

August.]

Date.	Hour.	Barometer.			Thermometer, Fah.			Force of vapour, ins.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
30	h. m.																	
	0 00	26.7	766.00	30.026	74.	73.	....	.790	3 A. M.: (D. 69.4)	86.	290	..	..	1.0	Ci s., Cu-s.	..	..	..
	2 00	26.5	765.35	30.001	73.7	72.6	....	.779	(A. 73.)	89.8	318	..	..	1.0	Ci-s., Cu-s.	..	..	..
	4 00	26.1	765.00	29.989	73.	72.	....	.764		90.2	323	..	..	1.0	Cu-s., N.	..	..	..
	6 00	26.	765.15	29.995	68.6	68.3	....	.685	9 A. M.: (D. 68.)	91.4	337	..	.75	1.0	Cu s., Ci-cu. Ci-s., rain	337	..	..
	8 00	25.	765.20	30.002	68.8	68.2	....	.679	(A. 70.)	91.8	70	..	.25	1.0	Cu., N., rain.	..	..	..
	10 00	25.2	765.00	29.993	73.2	71.	....	.727		88.	235	..	..	.7	Ci-cu., broken Cu.	270	..	..
	12 00	26.2	764.25	29.959	78.	74.5	116.	.801	3 P. M.: (D. 72.)	85.	330	..	..	.6	Cu.	293	..	..
	14 00	27.4	763.70	29.931	79.6	74.4	119.5	.781		82.	45	..	..	..	Cu.	67	..	..
	16 00	28.4	762.80	29.892	80.4	74.5	98.5	.775	(A. 79.7)	80.9	5	..	..	..	Cu.	0	..	..
	18 00	28.	762.60	29.886	78.2	74.8	..	.812	9 P. M.: (D. 69.5)	84.	42	..	..	.2	Cu., Ci-cu.	45	..	..
	20 00	27.5	762.70	29.892	73.	71.5	73.5	.747	(A. 71.7)	90.3	30	..	..	..	Ci-cu. in SE.	..	..	..
31	22 00	26.8	762.70	29.896	70.9	69.3	69.	.694		91.4	30	..	..	..	Clear.	..	..	..
	0 00	26.	762.00	29.871	70.6	69.	67.3	.686	3 A. M.: (D. 62.6)	92.	106	..	..	.1	Ci., Ci-cu.	157	..	..
	2 00	25.6	761.55	29.856	69.1	65.3	63.8	.581	(A. 68.9)	85.	130	..	..	.4	Cu., Ci-cu.	135	..	..
	4 00	25.	761.25	29.847	68.2	63.8	63.	.545	9 A. M.: (D. 62.5)	81.9	147	..	..	.7	Ci., Ci-cu., Ci-s.	135	..	..
	6 00	24.1	761.65	29.867	67.8	62.3	....	.504		80.	130	..	..	..	Clear.	..	..	..
	8 00	24.6	761.75	29.869	71.	65.2	104.5	.557	(A. 72.5)	77.2	130	..	..	..	Clear.	..	..	..
	10 00	25.1	761.70	29.865	74.5	67.5	115.	.593	3 P. M.: (D. 63.)	65.5	130	..	..	..	Scattered Cu., Ci-cu. in S.	..	..	..
	12 00	26.	761.40	29.848	76.8	64.8	121.	.481	(A. 78.4)	67.5	93	..	..	..	Scattered Cu., Ci cu. in S.	..	..	..
	14 00	26.6	760.65	29.816	77.8	67.3	114.2	.550		71.8	95	..	..	..	Scattered Cu.	..	..	..
	16 00	27.2	760.35	29.797	78.3	67.3	116.8	.545	0 P. M.: (D. 63.5)	82.8	95	..	..	..	Scattered Cu.	..	..	..
	18 00	27.5	760.30	29.794	76.5	70.	..	.577		85.	180	..	..	..	A little Ci-s., Ci-cu.	..	..	..
	20 00	26.5	760.50	29.812	70.4	65.6	....	.594	(A. 69.5)			..	..	1.0	Cu., Ci-cu.	180	..	..
	22 00	25.5	760.85	29.829	68.2	65.4	....					..	..

SEPTEMBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

[97]

Day.	Hour.	Barometer.			Thermometer, Fnh.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiatop.			Dir., degrees.	Force, lbs.				1.	2.	3.
1	h. m.																
	0 15	25.9	760.55	29.816	68.	65.	...	.583	85.	164	...	...	1.0	Cu-s, Ci cu.	...	...	...
	2 15	24.	760.00	29.802	67.	63.8	61.3	.557	86.6	140	...	...	.05	Cu.	...	...	...
	4 15	23.6	759.55	29.787	64.	62.6	60.4	.554	90.	157	...	...	...	Clear.	...	...	...
	6 15	23.4	760.30	29.818	64.2	62.	...	.534	89.	153	...	...	...	Clear.	...	...	...
	8 15	23.8	761.25	29.852	70.	65.	107.	.561	81.6	170	...	...	...	Clear.	...	...	...
	10 15	24.	761.30	29.849	72.5	66.1	116.	.568	79.	103	...	...	...	Ci., Cu.	...	...	...
	12 15	25.1	761.20	29.845	75.4	67.8	122.	.592	75.7	103	...	...	.4	Cu.	...	...	...
	14 15	26.5	760.50	29.812	77.4	69.	119.	.576	71.5	115	...	...	.4	Ci., Cu.	...	...	...
	16 15	27.4	760.70	29.814	78.5	68.5	108.	.580	69.	122	...	...	.7	Ci., Cu., S.	...	...	...
	18 15	27.1	760.70	29.816	76.	71.	...	.695	76.2	108	...	...	1.0	Ci., Cu., S.	...	...	...
	20 15	26.2	761.05	29.834	70.3	67.3	...	.632	87.	108	...	...	.9	Ci., Cu., S.	...	...	...
	22 15	24.6	761.20	29.847	67.6	66.5	62.3	.636	91.2	63	...	...	...	A few Ci., S.	...	...	...
	0 15	24.3	761.20	29.848	65.7	64.9	62.	.606	92.	62	...	...	...	Clear.	...	...	...
	2 15	24.	761.00	29.841	65.	64.2	61.4	.592	93.	46	...	...	...	Clear.	...	...	...
	4 15	24.1	761.85	29.875	65.	64.6	63.	.605	94.2	46	...	...	.1	Ci.	...	...	45
2	6 15	23.1	762.05	29.867	65.2	65.	...	.615	94.	45	...	...	.4	Ci., S.	...	...	...
	8 15	23.5	761.60	29.868	72.	70.	93.	.705	90.	20	...	...	.3	Ci.	...	...	...
	10 15	25.5	761.65	29.860	77.5	72.5	104.5	.733	83.	45	.6	...	.2	Ci.	...	...	...
	12 15	26.6	762.00	29.868	79.	72.6	110.	.721	80.2	40	.7	...	.2	Slight Ci., Cu.	...	...	...
	14 15	27.8	761.60	29.848	81.3	74.7	111.	.773	78.6	45	.8	...	.1	Ci.	...	...	...
	16 15	28.5	761.30	29.832	82.	74.3	114.	.750	76.8	38	.6	...	.1	Ci., Ci-s	...	...	...
	18 15	28.5	761.25	29.830	80.	74.4	...	.776	78.	38	...	...	.1	Ci., Ci-s	...	...	...
	20 15	28.	763.40	29.917	78.	70.5	...	.756	75.	156	1.2	...	1.0	Ci., Cu.	...	...	...
	22 15	27.9	764.00	29.942	72.	67.	...	.604	84.3	115	.2	...	1.0	Ci.	...	...	...

SEPTEMBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

Day.	Hour.	Barometer.				Thermometers, Fah.		Hygr., Saunures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds		
		Temperature.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.		Dir., degrees.	Force, lbs.				1.	2.	3.
52	3	26.1	762.00	29.871	70.	68.6	...	680	45	...	.06	.7	Cl., Ci.s., Ci-cu.	...	...	...
	0	15	761.80	29.866	68.6	66.8	...	635	76	...	...	.2	Cl., Ci-cu.	...	...	...
	2	15	761.50	29.857	68.1	66.8	64.8	...	...	...	...	...	Clear.	...	...	...
	4	15	761.30	29.851	67.6	66.6	...	636	76	...	...	...	Clear.	...	...	...
	6	15	761.30	29.851	67.6	66.6	...	636	76	...	...	...	Clear.	...	...	...
	8	15	762.65	29.902	74.2	71.5	108.	733	35	...	...	1	Cu., Ci.s. in S.	...	...	...
	10	15	762.65	29.896	73.6	75.8	115.	88.	20	...	...	.2	Cu.	...	...	...
	12	15	762.00	29.860	84.	77.	118.5	835	20	...	...	.3	Cu.	...	...	...
	14	15	760.75	29.809	85.	76.1	115.	787	20	...	...	.3	Cu.	...	...	...
	16	15	759.80	29.770	83.7	74.7	108.7	747	20	...	...	.3	Cu., Ci.s.	...	22	...
	18	15	759.20	29.747	79.	74.	...	772	340	...	...	.2	Clear.	...	22	...
	20	15	759.35	29.758	75.5	73.5	73.5	782	355	1	...	.4	Cl.	...	22	...
4	22	15	759.25	29.754	75.	73.5	73.1	798	0	...	...	...	Cl.	...	337	...
	0	15	758.50	29.730	75.2	74.	74.3	814	23	...	...	.4	Ci.s., Ci-cu.	...	45	...
	2	15	757.80	29.704	75.5	73.6	...	785	38	...	...	1.0	Ci.s., Ci-cu., Cu.s.	...	0	...
	4	15	757.35	29.686	74.2	72.8	...	781	86	...	.04	1.0	Ci.s., Ci-cu., Cu.s., N.	...	90	...
	6	15	757.05	29.677	74.	72.9	...	786	33	...	...	.9	Ci.s., Ci-cu., Cu.s.	...	...	...
	8	15	757.05	29.677	75.4	74.	...	801	55	2	...	.7	Ci-cu., Cu.	...	...	...
	10	15	756.80	29.663	79.5	74.3	118.	82.5	73	3	...	.3	Ci-cu., Cu.	...	...	...
	12	15	756.25	29.634	81.4	72.7	119.	897	90	3	...	.4	Cu., Ci-cu.	...	90	...
	14	15	755.40	29.598	82.3	73.3	133.	712	90	5	...	.7	Cu.	...	90	...
	16	15	755.40	29.597	82.	73.4	...	716	73.	...	...	.7	Cu.	...	135	...
	18	15	755.50	29.605	79.	72.5	...	716	125	5	...	...	Cu. at Hor.	...	...	...
	20	15	756.25	29.634	74.5	68.	71.2	609	130	1.0	...	.1	Ci-cu.	...	...	...
	22	15	757.00	29.671	72.2	68.2	67.7	642	138	...	...	...	Clear, Exc. slight Ci. in S.	...	...	...

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

SEPTEMBER.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Hyg., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.	Radiation.		Dir., degrees.	Force, lbs.				1.	2.	3.
8	0 15	22.1	764.20	29.978	63.8	62.8	62.	.563	94.	229	..	.3	Cl-cu., Cu s.	..	..	..
	2 15	21.9	764.00	29.970	63.2	62.6	..	.563	94.2	180	..	.7	Cl., Cl-cu., Cu-s.	..	..	..
	4 15	21.7	764.00	29.971	61.8	60.8	60.	.536	94.	180	..	.1	Cl., Cl-cu.	..	..	..
	6 15	21.2	764.25	29.984	61.9	61.6	..	.549	93.7	205	..	.3	Cl., Cu., Cu-s.	..	247	..
	8 15	21.7	764.70	29.999	65.	62.6	..	.549	89.	335	..	.6	Cu.	..	..	..
	10 15	22.5	764.65	29.998	69.5	63.5	..	.520	79.5	250	..	.4	Cu.	..	..	..
	12 15	23.6	764.00	29.982	71.5	64.	120.	.612	75.	245	..	.1	Cu.	..	..	..
	14 15	24.2	763.60	29.943	73.7	65.5	122.3	.536	73.	260	..	..	Clear	..	..	..
	16 15	24.7	763.80	29.941	74.	65.6	101.7	.534	68.5	235	..	..	Cu. at Hor.	..	..	..
	18 15	24.7	763.90	29.953	71.	64.8	..	.542	73.	255	..	..	Clear	..	..	..
	20 15	23.5	764.75	29.992	65.5	63.5	..	.565	87.5	298	..	..	Clear	..	..	..
	22 15	23.	764.60	29.989	63.5	60.5	68.9	.509	90.2	300	..	..	Clear	..	..	..
9	0 15	21.8	764.50	29.991	59.5	58.8	57.	.495	94.5	196	..	..	Clear	..	..	..
	2 15	21.4	764.35	29.987	58.6	58.	56.4	.482	94.7	166	..	..	Clear	..	..	..
	4 15	21.	764.75	30.004	57.7	57.2	56.2	.470	95.2	173	..	..	Clear	..	..	..
	6 15	20.8	765.25	30.034	57.	56.2	..	.452	94.2	172	..	.3	Cl., Cl-cu., Cl-s.	..	..	..
	8 15	21.2	765.60	30.037	64.7	62.6	..	.452	87.2	185	..	..	Clear	..	..	..
	10 15	23.5	765.50	30.026	70.5	66.	118.	.587	83.	275	..	..	A few small Cu.	..	..	..
	12 15	24.	765.40	30.014	73.7	66.7	121.	.573	77.	275	..	.1	Small Cu., scattered.	..	..	..
	14 15	24.8	765.25	30.005	75.6	68.6	123.5	.615	76.	240	..	.3	Cu.	..	225	..
	16 15	25.5	765.35	30.005	76.3	67.	113.6	.553	72.5	251	..	..	Cu.	..	..	..
	18 15	26.	766.70	30.017	73.3	67.	..	.587	75.	237	..	..	Clear	..	..	..
	20 15	25.	766.50	30.054	66.8	64.3	..	.575	82.1	230	..	..	Clear	..	..	..
	22 15	24.	766.90	30.074	62.5	60.4	59.9	.506	89.	267	Clear

September.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Date.	Day.	Hour.	Barometer.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Gausseur's.	Wind.		Sky covered, 10ths.	Rain, inches.	Clouds, &c.	Direction of the strata of clouds.		
			Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.			Dir. points.	Force, lbs.				1.	2.	3.
10		0 15	22.7	766.50	30.065	61.	60.	.512	92.	178	..	..	..	Cu. in E.	..	..	..
		2 15	22.8	766.30	30.059	62.	61.2	.535	92.8	193	..	..	1.0	Ci-cu., Ci-s.	..	..	..
		4 15	22.	766.10	30.053	63.2	62.	.545	92.	167	..	..	1.0	Ci-cu., Ci-s., Cu.	..	..	..
		6 15	21.7	766.50	30.070	63.	61.6	.536	91.9	170	..	..	1.0	Ci cu., Ci s., Cu.	..	..	..
		8 15	21.8	766.00	30.074	67.	64.5	.579	88.3	190	..	..	.9	Cu.	..	..	..
		10 15	22.3	766.30	30.059	69.6	64.	.533	80.5	270	..	..	.9	Cu.	..	..	..
		12 15	23.4	765.84	30.034	72.2	65.2	.541	75.6	190	..	..	.3	Cu.	..	..	..
		14 15	24.3	765.00	29.997	74.	66.7	.570	75.4	225	..	..	.1	Cu., Ci.	..	..	..
		16 15	25.3	764.45	29.972	75.2	67.4	.679	73.2	250	..	..	.2	Cu., Ci.	..	..	..
		18 15	24.9	764.35	29.969	73.	68.	.624	78.5	300	..	..	.8	Cu.	..	..	..
11		20 15	21.3	765.00	29.997	67.5	64.5	.573	83.3	310	..	..	.1	Cu.	..	..	..
		22 15	23.8	765.00	29.999	62.4	60.	.496	89.2	320	..	..	..	Cu.	..	..	..
		0 15	23.2	764.60	29.987	61.8	60.3	.511	92.	315	..	..	..	Clear	..	..	..
		2 15	22.	763.75	29.960	61.	60.5	.526	91.8	315	..	..	1.0	Ci-cu., Ci-s., Cu.	..	..	..
		4 15	21.4	763.40	29.949	64.	59.4	.506	93.8	235	..	..	.3	Ci-cu. in E.	..	..	..
		6 15	21.	763.45	29.968	60.	59.6	.511	94.2	145	..	..	1.0	Foggy, with much dew.	..	..	..
		8 15	21.	764.20	29.982	64.	63.	.567	91.3	180	..	..	1.0	Cu., S.	..	..	..
		10 15	21.5	764.20	29.991	68.5	66.	.618	87.3	95	..	..	1.0	S.	..	..	..
		12 15	22.6	763.65	29.953	72.8	68.	.626	82.	80	..	..	.8	Cu., S.	..	90	90
		14 15	23.9	762.70	29.915	76.	69.6	.652	81.	90	..	..	.7	Cu.	..	90	90
20	15	16 15	24.7	762.75	29.908	74.3	68.5	.626	80.	135	..	..	.6	Cu.	..	135	135
		18 15	25.	763.15	29.921	72.	68.4	.649	88.5	130	..	..	..	Clear	..	..	..
		20 15	24.4	763.45	29.936	68.	65.5	.600	90.	158	..	..	..	Clear	..	..	..
		22 15	24.	763.75	29.949	67.9	65.4	.597	91.2	353	..	..	..	Clear	..	..	..

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

SEPTEMBER.]

Data.		Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., saunures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
13	h. m.																
0	15	23.2	763.80	29.955	68.2	66.2	...	.619	91.8	176	...	...	1	Cu., S.	...	...	...
2	15	23.	763.20	29.933	67.9	66.1	...	.620	90.9	175	...	...	.7	Cu., S.	...	...	...
4	15	23.	763.05	29.927	67.3	64.7	...	.581	89.7	193	...	...	1.0	Dark Cu.	...	...	...
6	15	22.7	763.60	29.950	66.4	63.4	...	.552	87.5	222	...	...	1.0	S. and Cu.	...	...	...
8	15	22.2	763.00	29.968	66.3	63.1	...	.535	90.	220	...	...	1.0	Cu., S., N., rain.	...	...	...
10	15	22.	764.20	29.978	66.5	62.5	...	.642	85.	215	...	...	.02	Cu., S.	...	...	...
12	15	22.8	763.80	29.958	69.5	62.5	...	.488	77.5	260	...	...	1.0	Cu., S.	...	...	...
14	15	23.	763.50	29.947	70.5	64.4	...	.536	75.1	245	...	...	1.0	Slight Ci cu.	...	...	...
16	15	23.1	763.35	29.939	70.2	64.5	...	.642	78.8	160	...	...	1.0	Ci cu.	...	...	...
18	15	23.	763.65	29.951	68.	64.9	...	.580	83.7	153	...	...	1.0	?	...	...	...
20	15	22.7	764.20	29.974	66.5	64.	...	.569	89.	160	...	...	1.0	...	...	...	...
22	15	22.5	764.65	29.993	65.	62.5	...	.540	86.3	166	...	...	1.0	...	...	...	...
0	15	22.	765.25	30.019	63.	60.5	...	.504	89.5	162	...	...	...	A few Ci s.	...	...	...
2	15	21.	764.85	30.009	59.8	56.	...	.415	84.9	172	...	...	...	Clear	...	...	...
4	15	20.4	765.65	30.043	57.7	54.1	...	.399	84.8	166	...	...	...	Clear	...	...	...
6	15	19.6	766.35	30.074	56.4	53.	...	.376	85.	163	...	...	1	A few Ci s.	...	...	...
8	14	20.	767.10	30.101	62.8	56.2	94.	.387	76.	180	2	...	.1	Ci.	...	...	...
10	15	21.	767.55	30.115	67.5	58.7	106.	.402	71.2	195	.5	...	.4	Ci.	...	...	...
12	15	22.	767.50	30.108	71.	60.5	105.	.414	67.5	190	.3	...	.7	Ci.	...	...	...
14	15	23.	767.15	30.089	71.9	59.6	109.8	.378	63.5	200	.4	...	.3	Ci., Cu.	...	202	90
16	15	24.	767.15	30.084	72.	61.5	108.2	.432	62.	185	...	...	...	Ci., Cu.	...	180	90
18	15	23.	767.70	30.111	71.5	62.	...	.463	70.	227	...	...	...	Ci., Cu.	...	...	...
20	15	22.	768.00	30.128	58.8	56.8	...	.448	83.9	210	...	...	...	Clear	...	...	...
22	15	20.7	768.10	30.138	59.	54.5	53.5	.365	81.5	155	...	...	...	Clear	...	...	...

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

SEPTEMBER.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gauss's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
15	A. m.																
	0 15	20.	768.30	30.147	56.5	51.7	52.8	.342	82.	163				Clear			
	2 15	19.2	768.45	30.158	54.1	51.2	50.5	.356	83.	168				Clear			
	4 15	18.2	768.65	30.169	52.3	49.2	49.	.328	84.7	165				Clear			
	6 15	17.6	769.55	30.209	51.6	48.4		.318	84.2	170				Clear			
	8 15	18.7	770.10	30.224	63.	55.6	92.	.367	74.1	230				Clear			
	10 15	20.	770.40	30.229	67.5	59.	118.3	.409	71.	225				S.			
	12 15	21.8	770.50	30.226	71.	60.8	119.5	.431	63.	240			.03	Cu., Ci., Ci-s., (slight)			
	14 15	23.	769.75	30.190	72.1	60.5	112.	.400	62.	270			.1	Ci., (W,) Cu.			
	16 15	23.6	769.75	30.187	72.4	60.4		.393	62.7	240			.6	Ci cu.			
	18 15	23.2	770.00	30.198	67.3	61.		.469	70.7	236							
16	20 15	22.2	770.75	30.232	60.	56.7		.492	79.2	278			.1				
	22 15	21.8	770.80	30.237	58.	56.	55.8	.435	87.8	255				Ci. at Hor.			
	0 15	20.9	770.75	30.240	55.4	53.1	53.	.389	88.	195			.5	Clear			
	2 15	19.9	770.35	30.239	54.7	52.8	52.2	.389	90.	188				S.			
	4 15	19.4	770.20	30.224	54.3	53.	52.6	.399	91.3	211			.2	Ci., S. around Hor.			
	6 15	18.2	770.50	30.241	54.5	53.1	52.6	.399	93.	232			.8	Ci., S.			
	8 15	18.3	770.85	30.255	61.2	58.2		.459	88.4	240			.9	Ci., S.			
	10 15	20.1	770.80	30.245	68.1	59.6		.419	73.5	250			.9	Ci., Cu., Ci-s.			
	12 15	21.2	770.25	30.218	69.	58.5		.378	67.5	285	.2		1.0	Ci., S., Ci-s.			
	14 15	21.8	769.80	30.199	68.6	58.1		.371	68.	250	.1		1.0	Ci-cu., S.			
	16 15	21.8	769.40	30.183	66.6	56.9		.361	69.	270	.1		1.0	Ci-cu., S.			
	18 15	21.5	769.00	30.168	63.	59.		.460	77.	264			1.0	Ci cu., S.			
	20 15	21.7	768.95	30.171	60.5	57.		.433	80.5	255				Clear			
	22 15	20.1	768.60	30.159	57.	54.5	54.5	.406	88.5	220				Clear			

[1891.]

DAILY METEOROLOGICAL OBSERVATIONS.

SEPTEMBER.]

Date.		Barometer.			Thermometers, Fnh.			Force of vapor, ins.	Hygr., Gauges &c.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
17	0 15	19.1	768.25	30.151	56.6	54.8	79.2	.419	91.8	211	..	..	1.0	S, Ci-a, N.	..	..	..
	2 15	19.	767.25	30.112	56.6	54.5	..	.411	89.8	209	..	..	1.0	S, Ci-a, N.	..	..	..
	4 15	18.8	766.90	30.089	57.	55.3	..	.438	90.6	191	..	..	1.0	Overcast, very dark.	..	..	..
	6 15	17.8	766.75	30.100	57.5	55.7	..	.433	85.	214	..	..	1.0	Overcast, N., Cu.	..	..	..
	8 15	18.2	766.65	30.092	58.8	57.4	..	.464	91.6	215	..	.01	..	S, Cu., N., raining.	..	..	..
	10 15	18.3	766.80	30.096	59.8	58.6	..	.483	94.	210	..	.05	..	S, N., rain.	..	..	..
	12 15	18.5	766.15	30.071	60.2	59.5	..	.479	93.	230	..	.12	..	Broken Cu., S., N., raining.	..	..	..
	14 15	18.7	764.20	29.994	59.2	58.	..	.476	93.	225	3	.12	..	N., S.	..	247	..
	16 15	18.3	761.20	29.995	57.5	56.	..	.441	94.	240	5	.10	..	N., S.	..	247	..
	18 15	18.1	764.25	29.999	56.5	52.5	..	.396	93.2	211	2	.19	..	N., S.	..	247	..
	20 15	17.2	763.80	29.984	53.5	52.9	..	.405	94.	200	7	.14	..	N., S.	..	247	..
	22 15	17.	763.25	29.964	53.5	52.6	..	.396	94.	200	1.0	.03	..	N., S.	..	247	..
	0 15	16.4	762.75	29.948	54.1	53.5	..	.389	90.8	200	5	..	.98	N., S.	..	..	..
	2 15	16.2	762.00	29.919	53.7	51.5	57.	.368	90.	172	3	..	.04	N., S.	..	..	..
	4 15	16.	762.25	29.929	53.6	52.2	52.2	.365	91.	174	..	..	..	Clear.	..	..	..
	6 15	15.7	762.90	29.957	53.6	52.2	52.5	.396	92.	149	1	..	..	Clear.	..	..	..
	8 15	16.6	763.60	29.979	58.8	58.	95.	.436	86.5	170	..	..	..	Clear.	..	..	..
	10 15	17.8	763.70	29.978	65.5	58.5	105.3	.419	76.4	160	1	..	..	Clear.	..	..	..
	12 15	19.2	763.50	29.963	70.6	61.5	..	.446	71.	210	3	..	..	Clear.	..	..	..
	14 15	20.5	763.30	29.948	73.1	64.6	..	.512	69.3	195	6	..	..	Clear.	..	..	..
	16 15	22.	763.90	29.966	73.	66.5	..	.574	76.	110	2	..	.1	Cu.	..	..	..
	18 15	22.	764.10	29.974	68.	63.5	..	.587	80.2	160	1	..	..	Clear.	..	..	..
	20 15	21.4	765.05	30.014	65.	61.	62.	.485	81.	160	2	..	..	Clear.	..	..	..
	22 15	21.1	765.20	30.021	63.5	59.	62.	.465	83.	160	2	Clear.

SEPTEMBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

[97]

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Day.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
20	0 15*	20.3	765.95	30.055	58.	56.8	...	.456	93.	19	...	...	...	Clear	...	...	...
	2 15	19.4	765.60	30.015	56.2	55.5	59.6	.442	93.8	27	...	...	...	Clear	...	...	...
	4 15	19.2	765.90	30.058	55.2	55.	54.2	.440	94.	154	...	...	...	Clear	...	...	...
	6 15	18.8	766.30	30.075	55.5	55.2	...	.442	94.	160	...	...	1.0	Foggy	...	...	...
	8 15	18.3	766.70	30.094	59.	58.5	...	.492	93.6	335	...	...	1.0	Very dense fog	...	...	...
	10 15	18.8	767.00	30.102	62.1	61.	...	.529	91.3	290	...	...	1.0	Very dense fog	...	...	...
	12 15	19.2	766.50	30.082	65.2	63.	...	.553	88.	80	...	...	1.0	Very foggy	...	...	...
	14 15	20.	765.80	30.050	69.	65.5	...	.588	85.	20	...	...	.9	Cu., S.	...	90	...
	16 15	21.2	765.05	30.039	69.3	65.	...	.568	83.	134	...	...	.8	Cu., Ci-cu.	...	135	...
	18 15	21.	765.65	30.039	65.5	62.5	...	.534	87.8	135	...	...	...	Cu. at Hor.	...	...	...
21	20 15	20.7	766.30	30.067	61.1	59.5	58.5	.497	93.2	135	...	...	...	Clear	...	...	...
	22 15	20.	766.00	30.058	57.3	55.5	55.9	.456	91.	220	...	...	...	Clear	...	...	...
	0 15	19.7	765.70	30.043	56.6	56.1	...	.453	94.	219	...	...	...	Clear, but hazy	...	...	...
	2 15	19.	765.55	30.045	55.6	55.3	...	.444	94.	209	...	...	...	Thick fog	...	...	...
	4 15	18.9	765.35	30.037	57.4	57.2	...	.471	94.	199	...	...	1.0	Thick fog	...	...	...
	6 15	18.5	766.15	30.071	59.2	58.9	...	.501	94.	201	...	...	1.0	Fog	...	...	...
	8 15	18.8	766.50	30.083	61.6	61.	...	.534	93.5	220	...	...	1.0	Very dense fog	...	...	...
	10 15	19.1	766.20	30.070	64.3	62.8	...	.557	91.3	275	...	...	1.0	Very dense fog	...	...	...
	12 15	19.7	765.80	30.052	67.5	63.7	...	.548	85.2	280	...	...	.9	Cu., S.	...	270	...
	14 15	21.	765.00	30.013	70.	65.	...	.560	80.5	70	...	...	.4	Cu., S.	...	292	...
22	16 15	22.3	764.15	29.974	72.	66.7	...	.593	79.9	20	...	...	.6	Cu., S.	...	292	...
	18 15	22.	764.00	29.965	68.1	64.	...	.580	84.2	27	...	...	.1	Cu., Ci-cu.	...	...	...
	20 15	21.	764.40	29.990	62.5	60.5	...	.509	90.	28	...	...	...	Clear	...	...	...
	22 15	18.7	763.70	29.974	60.8	59.	...	.486	91.5	25	...	...	...	Clear	...	...	...

* Thirty minutes late.

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

SEPTEMBER.]

Day.	Hour.	Barometer.			Thermometers, Fahr.			Force of vapor, ins.	Hygr., percentage.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dr., degrees.	Force, fms.				1.	2.	3.
55	4	19.5	763.25	29.952	59.4	58.3	...	.482	94.	286	...	...	4	Cu, S.	...	...	...
	0	15	762.40	29.919	59.6	58.5	...	.486	94.	192	...	...	7	Cu, S.	...	...	...
	2	15	763.15	29.949	59.1	58.5	...	.491	94.2	184	...	...	9	Cu, S.	...	...	...
	4	15	763.30	29.917	59.8	59.	...	.497	94.5	176	...	...	1.0	Cu, S.	...	...	...
	6	15	762.30	29.917	62.1	60.6	...	.617	91.5	195	...	...	1.0	Cu, S.	...	...	...
	8	15	762.00	29.903	65.	61.	...	.496	85.3	250	...	...	1.0	Cu, S.	...	...	...
	10	15	761.00	29.881	65.5	60.5	...	.475	88.	270	...	...	1.0	Cu, S.	...	...	...
	12	15	759.90	29.817	66.2	60.7	...	.473	80.2	270	...	...	1.0	Cu, S., Ci-s.	...	...	...
	14	15	759.00	29.772	65.5	61.	...	.490	82.5	245	...	...	1.0	Cu, S., Ci-s.	...	...	...
	16	15	758.80	29.772	63.6	60.	...	.482	86.	245	...	...	1.0	Cu, S., Ci-s.	...	...	...
	18	15	759.30	29.789	62.8	59.8	...	.486	87.	300	...	...	1.0	Ci-s.?	...	...	...
23	0	15	759.10	29.783	60.8	58.5	...	.478	90.5	310	...	...	5	Ci-s.?	...	...	...
	2	15	758.95	29.780	60.	58.5	...	.481	87.	299	...	...	1.0	N.?	...	...	...
	4	15	758.55	29.765	59.5	57.7	...	.465	89.	242	...	...	1.0	Overcast.	...	...	...
	6	15	758.35	29.759	60.2	58.2	...	.470	88.	289	...	...	1.0	Cu, S.	...	...	...
	8	15	758.70	29.773	59.5	57.5	...	.458	91.5	240	...	...	9	Cu, S., Ci-s.	...	...	...
	10	15	758.65	29.771	65.2	62.	...	.523	87.	270	...	...	4	Cu, Ci, S., Ci-cu.	...	...	...
	12	15	758.50	29.760	68.1	64.5	...	.566	87.	290	1	...	1.0	Cu, Ci-cu, Ci-s, showery.	...	0	...
	14	15	758.05	29.740	69.5	66.5	...	.614	88.5	290	...	.03	1.0	Cu, Ci-s, showery.	...	315	...
	16	15	757.65	29.725	69.3	66.3	...	.610	88.	305	2	...	1.0	Cu, N., Ci-s.	...	315	...
	18	15	757.50	29.719	68.1	66.	...	.617	89.3	256	3	...	1.0	Cu, N.	...	...	...
	20	15	758.00	29.741	67.	66.4	...	.639	93.5	280	...	.01	1.0	N., raining.	...	...	...
	22	15	758.25	29.747	66.6	66.	...	.631	93.5	270	...	.01	1.0	N.	...	...	...
	22	15	758.25	29.749	68.	67.5	...	.664	93.*	270	...	...	1.0	N.	...	...	...

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

Syracuse.]

Date.		Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
24	A. M.																
	0	15	21.3	758.35	29.751	68.3	67.8	...	.671	93.	260	...	1.0	N.			
	2	15	21.3	757.85	29.732	68.5	68.1	...	.679	93.5	261	...	1.0	N.			
	4	15	21.7	758.85	29.769	69.	68.8	...	.697	93.5	266	...	1.0	N., drizzling.			
	6	15	21.7	758.25	29.745	69.5	69.2	...	.705	93.5	272	...	1.0	Cu., S.			
	8	15	22.	758.80	29.766	71.2	70.7	...	.738	93.5	0	...	1.0	Cu., S.			
	10	15	22.3	759.20	29.779	73.3	72.3	...	.772	93.5	0	...	1.0	S., N.			
	12	15	23.2	758.00	29.727	77.7	75.	...	.824	88.5	315	...	.07	Cu., Ci., S.			
	14	15	24.	757.10	29.688	76.2	72.5	...	.747	87.3	340	...	1.0	Cu., Ci-s, S.		0	
	16	15	24.3	757.20	29.691	73.8	70.6	...	.705	89.	350	...	.01	Cu., N.			
	18	15	24.2	757.10	29.688	71.9	70.	...	.706	92.5	300	...	1.0	Cu., N., raining			
	20	15	23.7	756.90	29.683	70.5	69.9	...	.718	93.2	313	...	1.0	Cu., N., raining			
25	22	15	23.6	755.90	29.544	70.1	69.5	...	.708	94.	345	...	1.0	Cu., N., raining.			
	0	15	23.7	755.70	29.636	70.4	69.7	...	.712	94.	330	...	1.0	Cu., N.			
	2	15	23.5	754.70	29.599	70.2	69.4	...	.704	93.5	320	...	1.0	N.			
	4	15	23.3	753.55	29.554	69.4	68.7	...	.689	93.5	295	...	1.0	N., raining.			
	6	15	23.3	753.30	29.544	69.3	68.6	...	.687	93.5	27	...	1.0	Cu., N.			
	8	15	23.2	752.70	29.521	70.3	69.4	...	.703	93.2	25	...	9	Cu., S.		45	
	10	15	23.8	752.00	29.506	74.5	71.	...	.712	86.5	35	...	.6	Cu., N., showery.		45	
	12	15	24.2	752.10	29.494	69.8	65.3	...	.570	85.	110	...	3	Cu.			
	14	15	24.3	753.00	29.527	71.	68.	...	.488	75.	110	...	2	Cu.			
	16	15	25.	754.30	29.576	71.1	63.7	...	.508	72.8	110	...	.1	Ca.			
	18	15	23.5	756.40	29.683	67.	61.	...	.474	75.9	110	...	...	A few Ci-s.			
	20	15	22.8	756.85	29.744	62.5	58.8	...	.450	79.3	90	...	...	A few Ci-s.			
22	15	21.8	759.20	29.782	60.5	57.5	...	.447	86.	70	...	...			

September.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Day.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussen's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
27	0	19.9	763.20	29.947	59.6	53.5	...	.352	76.3	143	...	...	...	Clear.	...	...	...
	1	19.8	763.20	29.951	56.5	52.3	...	.356	80.	150	...	...	...	Clear.	...	...	...
	2	18.5	764.50	30.006	52.1	49.7	...	.343	86.	165	...	...	...	Clear.	...	...	...
	4	16.4	764.75	30.027	51.	49.5	...	.350	86.8	38	...	...	...	Clear.	...	...	...
	6	15	765.75	30.058	58.6	53.8	...	.370	80.3	180	...	...	...	Clear.	...	...	...
	8	15	765.75	30.068	63.4	55.	...	.346	71.	220	...	...	...	Clear.	...	...	...
	10	15	766.00	30.083	66.1	59.2	...	.430	72.	0	...	...	...	Clear.	...	...	...
	12	15	765.55	30.039	66.1	59.2	...	.444	71.	30	...	...	...	Clear.	...	...	...
	14	15	764.85	30.007	68.9	62.7	...	.500	73.4	38	...	...	...	Clear.	...	...	...
	16	15	764.55	29.989	69.	62.7	...	.446	81.	20	...	...	...	Clear.	...	...	...
	18	15	764.60	29.995	62.5	58.3	...	.469	89.8	0	...	...	...	Clear.	...	...	...
28	20	15	764.60	29.998	59.3	57.8	...	.463	92.	20	...	...	...	Clear.	...	...	...
	22	15	764.70	30.006	58.2	57.1	...	.459	93.	2	...	...	.2	Cl., Cu.	...	...	...
	0	15	764.30	29.991	58.2	57.	...	.462	93.	332	...	...	1.0	Cl., Cu., S	...	...	...
	2	15	763.40	29.958	57.5	56.8	...	.506	91.	237	...	...	.8	Cu.	...	...	...
	4	15	762.30	29.951	60.3	59.5	...	.524	87.	263	...	...	1.0	Cu., S	...	...	...
	6	15	763.30	29.952	60.9	60.4	...	.609	87.3	0	...	...	1.0	Cu., S	...	...	...
	8	15	763.00	29.941	66.	65.1	...	.693	85.	0	...	...	.4	Cl., Cu.s	...	...	...
	10	15	762.20	29.905	73.	70.	...	.652	81.3	40	...	...	.7	Cu.	...	...	...
	12	15	761.75	29.880	74.5	69.3	...	.691	84.1	50	...	...	1.0	Cu., N.	...	...	...
	14	15	760.80	29.841	73.5	69.8	...	.653	82.	359	...	...	1.0	Cu., Cl., Cu.	...	...	...
	16	15	760.00	29.805	75.3	69.6	...	.653	86.	340	...	...	.7	Cl-cu., Cl-s	...	...	...
	18	15	759.75	29.795	70.5	68.	...	.615	87.3	0	...	...	.1	Cl-cu., Cl-s	...	...	...
	20	15	760.00	29.806	68.	66.	...	.631	88.5	0	...	...	1.0	Cl-cu., Cl-s	...	...	...
	22	15	759.70	29.797	68.	66.5	...	...	...	...	...	...	...	...	...	...	...

[1941.]

DAILY METEOROLOGICAL OBSERVATIONS.

OCTOBER.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, lbs.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Old height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
1	A. m.																
	0 15	16.5	763.00	29.957	49.7	47.	...	306	84.	173	...	...	1	Cl., Cu.	...	...	...
	2 15	15.8	763.35	29.973	46.3	44.3	42.2	284	86.	159	...	...	...	Clear.	...	...	...
	4 15	14.9	763.20	29.971	46.1	44.2	42.5	284	87.8	142	...	...	...	Clear.	...	...	...
	6 15	14.4	764.25	30.016	45.2	43.3	...	275	88.	160	...	...	1	S.	...	...	...
	8 15	14.6	765.35	30.058	49.3	45.8	...	289	88.	185	...	...	...	Cl., S. to the S.	...	...	...
	10 15	15.5	765.65	30.066	54.	48.5	103.	292	75.2	160	...	...	1	Cl., S., Cu.	...	...	...
	12 15	16.9	765.70	30.061	57.2	49.	...	268	68.	170	...	...	4	Cu.	...	180	...
	14 15	18.	765.40	30.044	59.7	51.	...	287	64.8	180	...	...	6	Cu.	...	135	...
	16 15	18.7	766.00	30.065	58.8	51.5	...	310	67.8	142	...	...	9	Cu., Cl.	...	...	...
	18 15	18.3	767.00	30.105	53.4	50.	...	234	75.1	142	...	...	1	Cu., Cl.	...	...	...
	20 15	17.3	767.60	30.134	48.	46.4	50.7	313	89.5	180	...	...	...	Clear.	...	...	...
	22 15	16.5	767.95	30.149	47.	45.	40.8	291	86.	180	...	...	...	Clear.	...	...	...
	0 15	15.3	768.35	30.174	45.6	43.5	38.7	275	86.	212	...	...	2	Cl., Cu., Cl., S.	...	...	...
	2 15	14.7	768.60	30.187	44.7	42.2	39.1	257	85.5	205	...	...	...	Cl., S. in S.	...	...	...
	4 15	13.7	768.55	30.190	43.3	40.6	39.2	239	85.	196	...	...	2	Cl., S.	...	...	...
2	6 15	13.	768.80	30.203	43.6	41.2	...	249	84.	190	...	...	9	Cl., Cu.	...	...	...
	8 15	13.1	769.80	30.226	47.8	44.4	...	289	82.3	240	...	...	7	Cl.-cu., Cl.-s.	...	...	...
	10 15	14.4	769.30	30.214	54.3	48.9	...	298	78.5	230	...	...	5	Cl., Cu., Cl.-cu.	...	...	...
	12 15	15.6	768.90	30.193	58.	50.6	...	298	73.	235	...	...	8	Cl., Cu., Cl.-cu.	...	...	...
	14 15	16.1	768.75	30.185	56.2	48.3	...	273	72.5	230	...	...	1.6	Cu., Cl.-cu.	...	...	...
	16 15	15.9	767.75	30.147	52.5	47.5	...	286	72.	235	...	...	1.0	Cu., Cl.-cu.	...	...	...
	18 15	15.1	767.60	30.145	51.	46.5	...	280	75.	235	...	...	1.0	Cu., Cl.-cu.	...	...	...
	20 15	15.	767.30	30.133	49.6	44.6	...	253	76.2	210	...	...	...	...	...	...	...
	22 15	15.	766.40	30.098	49.5	44.3	...	248	76.	210	...	...	...	...	...	...	...

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

October.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.		Dir., degrees.	Force, lbs.				1.	2.	3.
4	0	8.9	759.90	29.872	41.8	39.6	...	236	155	.5	...	.9	N., Cu., Ci.	...	...	...
	15	8.8	759.60	29.860	42.5	40.	...	236	140	.2	...	1.0	Cu., S., N.	...	...	...
	2	8.9	759.55	29.858	43.8	41.5	...	264	130	.5	...	1.0	S., Cu., few N.	...	...	...
	4	8.9	759.55	29.858	43.8	41.5	...	277	125	.4	...	.6	Cu., Ci., Cu', S., Ci.	...	...	...
	6	8.8	760.20	29.884	43.7	42.6	...	238	150	.3	...	.7	Ci., Cu., Ci-cu.	...	...	...
	8	9.5	760.70	29.901	46.	42.	...	239	150	.6	...	1.0	Ci., Cu., Ci-cu.	...	...	...
	10	10.	761.60	29.953	48.2	43.2	...	236	150	.2	...	1.0	Cu., Ci-cu., Ci-a.	...	...	...
	12	10.7	762.20	29.953	51.	44.5	...	235	150	.8	...	.8	Ci., Ci-cu., Cu.	...	...	...
	14	12.	761.80	29.932	54.	46.	...	233	150	.7	...	.3	Ci., Ci-cu., Cu.	...	...	...
	16	12.9	762.90	29.970	54.2	46.	...	262	140	.3	...	.9	Ci., Ci-cu., Cu.	...	...	...
	18	12.9	764.15	30.019	51.5	46.	...	245	155	...	...	...	Ci-a. at Hor.	...	...	...
	20	13.2	765.00	30.050	48.	43.2	...	234	137	...	...	...	Ci-a. at Hor.	...	...	...
5	22	12.2	764.90	30.053	43.9	41.2	...	225	82.8	...	...	...	Clear.	...	...	...
	0	11.7	764.45	30.037	42.6	40.	53.	225	82.9	...	...	...	Clear.	...	...	...
	2	10.9	764.40	30.040	42.2	39.3	53.3	222	81.	...	...	...	Clear.	...	...	...
	4	10.7	764.90	30.060	41.4	38.7	54.	226	85.	...	...	...	Ci., Cu.	...	...	...
	6	9.8	765.30	30.080	40.1	38.2	...	226	81.5	...	...	...	Ci., Ci-cu.	...	...	...
	8	10.	765.70	30.091	43.5	40.	...	211	150	.1	...	.6	Ci., Ci-cu., Cu.	...	...	...
	10	10.9	765.55	30.085	47.6	43.	...	243	140	...	...	.9	Ci., Ci-cu., Cu.	...	...	...
	12	12.1	765.00	30.056	52.6	45.7	91.5	253	120	...	...	.3	Ci., Cu.	...	...	...
	14	12.7	764.25	30.020	56.6	48.1	86.	263	160	...	...	.2	Ci., Cu.	...	...	...
	16	14.8	764.35	30.019	57.2	50.	...	291	111	...	...	...	Cu.	...	...	...
	18	15.	764.55	30.025	51.3	48.5	...	323	76.	...	...	...	Cu.	...	...	...
	20	15.	764.75	30.033	49.	46.4	41.8	278	85	...	...	...	Clear.	...	...	...
	22	13.5	764.95	30.048	43.4	42.5	40.8	279	175	...	...	...	Clear	...	...	...

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

OCTOBER.]

Date.	Hour.	Barometer.			Thermometer, Fah.			Force of vapor, ins.	Hygr., Sausure's.	Wind.		Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature.	Old height.	Corr. height.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.			1.	2.	3.
6	A. m.															
	0 15	12.8	764.75	30.044	42.1	41.2	39.4	.266	90.5	174	..	.3	Cu., Cu-s.	..	..	..
	2 15	12.	764.65	30.044	42.	40.9	40.	.261	91.	162	..	.2	Cu., Ci-cu., Ci s.	..	..	..
	4 15	11.7	764.80	30.051	41.	39.9	37.5	.262	90.5	155	..	.4	Ci.	..	..	..
	6 15	10.9	765.15	30.069	40.	38.3	..	.230	89.5	146	..	.3	Ci., S., Cu	..	..	..
	8 15	11.5	765.50	30.080	45.5	41.5	..	.233	81.	150	..	.1	Ci.	..	..	..
	10 15	12.5	765.20	30.063	52.2	45.2	93.	.237	73.	150	.1	.05	Ci., Cu	..	..	..
	12 15	13.8	764.30	30.021	55.8	49.8	85.	.284	71.6	150	.1	.4	Cu.	..	157	..
	14 15	15.	763.45	29.981	57.8	49.8	96.	.284	68.	110	.2	.3	Cu.	..	..	..
	16 15	15.5	763.80	29.992	57.8	47.5	..	.231	63.5	170	.2	.1	Cu.	..	..	..
	18 15	15.6	764.40	30.016	52.	46.5	..	.268	67.6	145	.1	..	A few Ci s.	..	..	..
	20 15	15.	764.40	30.019	43.2	41.5	37.7	.280	85.5	145	..	..	Clear	..	..	..
7	2 15	13.2	764.35	30.025	45.	42.	40.	.257	81.5	150	..	..	Clear	..	..	..
	4 15	12.7	763.80	30.006	43.	40.5	37.7	.241	83.8	160	..	..	Clear	..	..	..
	6 15	11.9	763.80	30.010	41.4	39.9	38.4	.246	89.2	135	..	..	Clear	..	..	..
	8 15	10.8	764.10	30.028	39.5	37.6	..	.246	84.6	128	..	..	Clear	..	..	..
	10 15	12.7	763.70	30.006	42.5	40.5	..	.221	87.	155	..	.2	S., Ci.	..	..	..
	12 15	13.9	763.60	29.993	48.1	..	..	..	79.4	147	..	.5	Ci-cu., S.	..	135	..
	14 15	15.4	760.70	29.873	59.5	51.7	96.	.311	79.	45	..	1.0	Ci-cu., S.	..	..	..
	16 15	16.5	760.00	29.840	59.1	52.6	..	.287	70.	10	..	.1	Very light Ci.	..	..	..
	18 15	16.1	759.70	29.829	54.2	50.7	..	.309	70.	0	..	.4	Very light Ci.	..	..	..
	20 15	16.	760.30	29.853	53.8	52.	..	.225	73.	0	..	.6	Ci.	..	..	..
	22 15	16.2	759.50	29.821	52.8	51.5	..	.342	80.1	34	..	.6	Ci-cu., Ci., Ci-s.	..	..	..
								.380	86.	10	..	1.0	N., raining.	..	..	..
								.978	98.	350	..	1.0	N?	..	..	..

DAILY METEOROLOGICAL OBSERVATIONS.

October.]

[1841.

Day	Date.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Sausures.	Wind.		Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.			1.	2.	3.
8	7a.															
	0 15	15.7	759.30	29.815	51.3	49.6	...	.349	94.2	352	...	.3	Cu., Ci-s.	...	...	...
	2 15	16.2	759.00	29.805	53.	51.4	...	.374	94.9	48	...	.7	Cu-s, S.	...	...	...
	4 15	15.	758.55	29.789	52.4	51.5	...	.383	94.8	42	...	1.0	Overcast.	...	...	...
	6 15	14.8	759.30	29.820	53.1	52.7	...	.405	94.4	15	...	1.0	Foggy.	...	...	...
	8 15	15.	759.00	29.806	54.7	53.5	...	.408	94.	90	...	1.0	S., Ci-s., Cu. broken.	...	...	...
	10 15	15.5	758.50	29.784	57.4	56.2	...	.448	91.5	25	...	1.0	S., Ci-s., Cu. broken.	...	...	...
	12 15	16.1	758.00	29.762	60.	57.2	...	.445	86.	25	...	1.0	Broken Cu., Ci-s.	...	90	...
	14 15	16.2	757.50	29.743	58.	56.6	...	.451	87.	70	...	1.0	Cu., N.	...	112	...
	16 15	17.	757.00	29.720	58.5	56.2	...	.435	87.	50	...	1.0	Cu., N.	...	...	...
	18 15	16.8	757.35	29.734	53.4	52.3	...	.392	93.	10	...	.3	Cu., Ci-s.	...	...	...
	20 15	16.2	757.50	29.743	53.	52.5	...	.402	93.5	10	...	1.0	Very dark	...	...	...
	22 15	15.9	757.90	29.760	52.5	52.	...	.394	94.	70	...	1.0	Cu., N.	...	...	...
9	0 15	15.4	758.00	29.766	53.1	52.6	...	.402	93.5	73	...	1.0	Cu., S., N., foggy.	...	...	...
	2 15	15.3	757.20	29.735	54.9	51.2	...	.348	82.	115	...	1.0	Cu., Cu-s, S.	...	...	...
	4 15	14.9	757.80	29.761	52.2	50.	57.4	.348	88.4	150	...	.1	Cu.	...	...	...
	6 15	14.8	759.35	29.822	47.7	46.8	...	.324	92.	71	...	...	Clear	...	...	...
	8 15	15.3	759.85	29.839	56.2	51.5	93.	.340	79.5	120	...	...	Clear	...	...	...
	10 15	16.8	760.00	29.838	59.9	52.6	103.	.362	72.5	95	...	...	Clear	...	...	...
	12 15	18.	759.40	29.808	62.5	52.8	96.	.302	66.	70	...	.1	Cu.	...	...	...
	14 15	18.9	759.15	29.793	64.5	53.5	...	.398	63.8	95	...	.8	Cu.	...	...	...
	16 15	18.9	759.75	29.817	60.8	51.7	...	.294	66.	100	...	...	Cu.	...	...	...
	18 15	17.7	761.00	29.872	57.	51.	...	.319	71.7	155	...	...	Cu.	...	...	...
	20 15	16.1	761.85	29.914	50.2	48.	...	.324	86.	182	...	...	Steady streaks like sunbeams.	...	...	...
	22 15	15.	762.40	29.940	46.	44.5	45.	.292	91.2	335	...	...	Clear	...	...	...

OCTOBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Day.	Date.		Barometer.				Thermometers, Fah.		Force of vapor, ins.	Hygr., Saunures's.	Wind.		Rain, inches.	Sky covered, 10ths.	Cloyde, &c.	Direction of the strata of clouds.		
	Hour.	Temperature.	Obs'd height.	millimetres.	Corr. height.	inches.	Dry.	Wet.			Dir., degrees.	Force, lbs.				1.	2.	3.
45	11	A. M.																
	0	15	765.80	765.80	30.082	30.082	41.1	40.2	.256	93.5	55	..	..	..	Clear	..	..	..
	2	15	765.25	765.25	30.065	30.065	39.7	39.5	.258	93.	148	..	..	..	Clear	..	..	..
	4	15	765.90	765.90	30.093	30.093	38.9	38.5	.247	94.2	167	..	..	..	Clear	..	..	..
	6	15	.....	.....	30.116	30.116	37.1	37.1	.239	94.3	145	..	..	2	Foggy, Cu	..	..	..
	8	15	765.50	765.50	30.085	30.085	46.6	46.3	.325	98.	8	..	..	2	Cl., S.	..	..	..
	10	15	765.40	765.40	30.071	30.071	55.6	52.2	.364	88.	40	..	..	2	Cu.	..	..	..
	12	15	764.00	764.00	30.005	30.005	61.8	54.5	.353	72.	15	6	..	2	Slight Cl., Ci-cu. in NW.	..	..	..
	14	15	762.40	762.40	29.936	29.936	62.8	55.1	.358	71.	0	8	..	8	Slight Cl., Ci-cu.	..	..	..
	16	15	762.50	762.50	29.936	29.936	60.5	55.	.380	76.6	350	3	..	1.0	Slight Cl., Ci-cu. in NW.	..	..	..
	18	15	761.75	761.75	29.909	29.909	57.5	54.5	.401	84.3	350	2	..	1.0	Questionable	..	..	..
	20	15	761.35	761.35	29.894	29.894	56.4	54.	.401	88.5	0	..	..	1.0	Questionable, very dark	..	..	..
12	22	15	760.35	760.35	29.851	29.851	56.	54.	.406	90.8	350	..	..	1.0	Questionable, very dark	..	..	..
	0	15	758.90	758.90	29.799	29.799	56.8	55.1	.431	91.7	6	..	..	1.0	N.	..	..	..
	2	15	757.75	757.75	29.754	29.754	56.8	55.6	.438	91.6	7	..	..	1.0	N., Cu s., very dark	..	..	..
	4	15	758.00	758.00	29.761	29.761	56.7	56.1	.452	93.5	7	..	.05	1.0	N., raining	..	..	..
	6	15	757.80	757.80	29.754	29.754	57.5	57.3	.476	93.6	7	..	.12	1.0	N., raining	..	..	..
	8	15	757.70	757.70	29.751	29.751	58.9	58.5	.494	93.	10	..	.13	1.0	N., S., raining	..	..	..
	10	15	757.00	757.00	29.719	29.719	61.3	60.8	.531	93.	15	..	.03	1.0	N., S., raining	..	..	..
	12	15	756.25	756.25	29.686	29.686	62.2	61.2	.533	92.	135	..	.01	1.0	S., N.	..	90	..
	14	15	756.15	756.15	29.681	29.681	62.6	60.7	.515	90.	125	..	..	1.0	Cu., N.	..	112	..
	16	15	756.40	756.40	29.688	29.688	63.2	61.	.505	90.	135	..	..	1.0	Cu., N.	..	112	..
	18	15	757.25	757.25	29.723	29.723	61.9	61.2	.536	93.5	135	..	..	1.0	Cu., N.	..	112	..
	20	15	758.10	758.10	29.754	29.754	60.	57.	.439	86.	145	..	..	1.0	Cu., N.	..	112	..
	22	15	758.75	758.75	29.783	29.783	56.5	51.	.313	76.8	155	..	..	1.0	Cu., N.	..	112	..

Date.	Hour.	Barometer.			Thermometers, Fah.			Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.		Dir., degrees.	Force, lbs.				1.	2.	3.
13	A. M.															
	0	17.2	758.85	29.790	54.2	49.5	...	31.4	164	.2	...	.8	Cu., Cu-s.	...	112	...
	1	16.4	759.00	29.800	51.4	46.9	...	.286	190	.1	...	.7	S., Cu-s., dark.	...	112	...
	2	15	759.75	29.833	50.1	46.2	...	.284	170	...	...	.9	Cu. and S.	...	...	...
	4	15	761.00	29.884	48.7	45.	...	.273	155	...	...	.6	Cu., S., Ci., Ci-cu.	...	...	...
	6	15	761.00	29.884	48.7	45.	...	.273	155	...	...	.6	Cu., S., Ci., Ci-cu.	...	...	...
	8	15	761.90	29.918	50.6	46.	...	.275	170	.1	...	.2	A few small Cu.	...	...	...
	10	15	762.65	29.945	52.6	44.8	86.3	.225	180	.5	...	.7	Cu.	...	...	...
	12	15	762.25	29.928	53.8	46.3	...	.245	160	.3	...	.6	Cu.	...	...	...
	14	15	762.20	29.926	55.5	46.5	...	.230	160	.1	...	.6	Cu.	...	...	...
	16	15	762.65	29.940	54.	46.5	...	.236	145	.1	...	.1	Cu.	...	...	...
	18	15	762.65	29.984	51.	45.2	...	.252	125	...	...	.0	Cu., Ci-cu.	...	...	...
	20	15	764.30	30.014	48.5	43.5	...	.242	155	.1	...	.3	Cu.	...	...	...
14	22	15	765.20	30.050	47.4	44.5	...	.276	145	...	...	.3	Cu.	...	...	...
	0	15	764.15	30.014	43.3	39.4	...	.215	143	...	...	...	A few detached Cu. in SE.	...	...	...
	2	15	765.00	30.053	41.	38.3	...	.218	144	...	...	...	A few small Cu. in Hor.	...	...	...
	4	15	765.05	30.058	39.9	38.5	...	.235	140	...	...	.5	Cu. and S.	...	...	...
	6	15	765.55	30.085	39.8	36.7	...	.200	138	...	...	.5	Cu.	...	...	...
	8	15	766.30	30.113	43.7	39.6	...	.214	135	.2	...	...	Clear	...	...	...
	10	15	766.30	30.109	49.	43.	79.	.225	135	.3	...	...	A few small Cu.	...	...	...
	12	15	765.60	30.074	52.6	44.6	86.	.219	135	.5	...	.4	Cu.	...	...	...
	14	15	765.30	30.059	54.	44.7	81.	.205	130	1.2	...	.3	Cu.	...	...	...
	16	15	765.20	30.050	53.4	45.3	75.	.226	130	.8	...	.1	Cu.	...	...	...
	18	15	765.35	30.061	48.5	44.4	...	.273	106	...	...	.1	A few Ci	...	...	...
	20	15	765.65	30.076	43.5	41.5256	84.2	Clear
	22	15	765.40	30.068	42.5	40.	35.5	.236	453	Cu.

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DAILY METEOROLOGICAL OBSERVATIONS.

October.].

Date.	Hour.	Barometer.		Thermometers, Fah.			Force of vapor, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.			Radiation.	Dir., degrees.	Force, lbs.			1.	2.	3.
15	h. m.															
	0 15	12.1	765.30	30.064	42.7	41.1	.355	87.8	45			.1	Cu.....			
	2 15	11.8	765.00	30.057	41.	39.7	.347	90.4	42				A few Cu.....			
	4 15	11.2	764.90	30.058	40.6	39.1	.339	89.8	47				Clear.....			
	6 15	10.4	764.60	30.060	41.5	41.2	.373	82.	38			.4	Cu, Ci., Cu-s.....			
	8 15	11.	763.40	29.998	45.8	43.7	.378	88.8	40			.8	Ci., Ci-cu.....			
	10 15	12.	762.70	29.967	53.	46.5	.358	72.5	45	.5		.7	Ci-cu.....			
	12 15	14.	760.30	29.863	57.5	48.7	.358	66.5	40	2.3		.1	Ci-cu.....			
	14 15	14.9	759.10	29.811	59.2	49.1	.349	62.	50	3.5			Clear.....			
	16 15	15.9	758.60	29.787	58.4	49.9	.377	66.	37	2.3			Ci-cu, Ci-s.....		112	
	18 15	16.9	758.75	29.793	55.8	50.5	.321	70.2	30	2			Doubtful.....			
	20 15	16.2	759.00	29.805	55.	51.4	.352	75.	57				Doubtful.....			
16	22 15	15.	759.30	29.818	53.5	50.4	.344	81.	20				Doubtful, very dark.....			
	0 15	14.8	759.50	29.828	53.6	50.	.333	78.8	30			.8	Doubtful.....			
	2 15	14.7	759.60	29.832	53.7	48.7	.301	76.2	76			1.0	N., raining.....			
	4 15	14.8	760.80	29.880	51.6	49.3	.339	85.	148			1.0	Very dark, N., raining.....			
	6 15	.....	.....	.....	.....	.....		.....	50		.05					
	8 15	14.1	762.20	29.937	50.5	47.7	.314	85.	140			1.0	Cu, Ci-cu, Ci-s.....		90	
	10 15	14.	762.40	29.945	51.	46.2	.274	78.	140			1.0	Ci-cu, Ci-s.....		90	
	12 15	14.	762.50	29.949	52.	46.	.239	73.	140			1.0	Cu, Ci-cu, Ci-s.....		90	
	14 15	14.8	762.65	29.952	52.4	46.6	.267	73.3	120			1.0	Cu, Ci-s.....			
	16 15	14.3	763.15	29.974	50.5	44.8	.248	73.	180			1.0	Cu, Ci-s.....			
	18 15	13.7	764.00	30.010	48.	44.2	.263	77.3	165			1.0	Cu.....			
	20 15	13.	764.80	30.045	44.5	40.	.214	74.	200			.3				
	22 15	13.2	765.30	30.068	40.5	37.	.199	77.	190			.3				

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DAILY METEOROLOGICAL OBSERVATIONS.

October.]

Date.		Barometer.				Thermometers, Fahr.			Force of vapor, ins.	Hygt., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.			
Day.	Hour.	Temperture, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.	Dir., degrees.			Force, lbs.	1.				2.	3.		
18	h. m.																		
	0 15	10.	766.35	30.120	88.4	35.4	39.5	.191	80.9	153				Clear.....					
	2 15	9.4	766.25	30.119	37.2	34.6	35.7	.189	83.8	157				A few Cu. in N.					
	4 15	8.9	766.00	30.112	36.7	34.2	35.	.187	84.3	159				Clear.....					
	6 15	8.1	766.50	30.136	36.1	33.8	....	.186	85.2	147				Clear.....				
	8 15	9.	767.15	30.151	40.5	37.9	74.2	.202	81.2	145				Clear.....					
	10 15	9.7	767.00	30.147	45.5	40.5	82.5	.212	76.2	145				Clear.....					
	12 15	11.	766.50	30.121	48.5	41.2	89.	.183	69.	150			.2	Cu.....					
	14 15	12.	766.30	30.097	50.5	41.3	81.	.172	62.5	150			.4	Cu.....					
	16 15	12.9	766.25	30.103	48.5	42.7	64.8	.224	65.2	135				Cu.....					
	18 15	13.	766.75	30.127	42.5	39.9	....	.233	72.5	145				Clear.....				
	20 15	11.	766.65	30.127	40.5	36.5	....	.188	75.8	145				Clear.....				
	22 15	10.2	766.70	30.133	38.4	35.	34.5	.183	79.2	145				Clear.....					
	19	0 15	9.6	766.35	30.122	37.	35.	32.9	.199	81.	145				Clear.....				
		2 15	8.9	765.90	30.108	34.5	33.	30.2	.190	85.2	145				Clear.....				
		4 15	8.4	765.75	30.104	33.3	32.	28.8	.184	86.	136				Clear.....				
		6 15	7.6	764.90	30.076	33.9	32.177	86.3	136			.4	Ci-cu., Cu-s.				
		8 15	7.5	765.00	30.079	38.7	36.4207	83.	136			1.0	Cu., Ci-s.				
10 15		8.3	764.10	30.089	43.8	38.7	....	.195	76.	140			1.0	Ci-cu., Ci-s.				
12 15		9.7	762.80	29.982	49.5	44.2	....	.247	74.	20			.9	Ci., Ci cu.		80		
14 15		10.2	761.75	29.938	49.4	43.2	....	.226	71.5	50				Ci-cu., Ci-s.				
16 15		10.5	760.60	29.892	48.3	42.5	....	.223	73.	50			1.0	Ci-cu., Ci-s.				
18 15		10.7	760.15	29.873	46.5	43.8	....	.272	77.9	50			1.0	Ci-cu., Ci-s.				
20 15		10.9	759.30	29.839	45.2	42.5258	83.	10			1.0	Cu.?					
22 15		10.6	758.30	29.801	45.2	43.4278	86.	30			1.0	Cu., N.					

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DAILY METEOROLOGICAL OBSERVATIONS.

October.]

Date.	Hour.	Barometer.			Thermometer, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
20	4																
	0	15	756.40	29.733	43.8	43.2	...	.288	94.5	5	..	..	1.0	Very dark, N., raining.	..	..	..
	2	15	754.15	29.645	43.5	43.	...	.288	94.6	256	..	..	1.0	Very dark, N., raining.	..	..	..
	4	15	753.00	29.593	44.3	44.	...	.301	94.	192	..	..	1.0	N., raining, very dark.	..	..	..
	6	15	752.40	29.570	44.5	44.5	...	.309	93.4	192	..	..	1.0	N., raining, very dark.	..	..	..
	8	15	751.35	29.526	46.8	46.2	...	.321	92.2	34	..	..	.9	Cu., N., raining.	..	..	..
	10	15	...	...	...	...	...	...	...	124	1	..	..	...	..	..	..
	12	15	...	...	...	...	...	...	...	100	2	..	..	...	..	..	..
	14	15	748.35	29.387	64.	49.3	...	.312	73.2	104	2	..	.9	Cu.	..	..	..
	16	15	...	...	...	...	...	...	...	90	5	..	..	...	..	..	..
21	18	15	...	...	...	...	...	...	...	100	..	..	..	...	..	..	..
	20	15	749.10	29.421	47.7	43.3	46.9	.249	77.	100	2	..	..	Clear.	..	..	..
	22	15	748.85	29.415	42.8	40.8	39.8	.250	86.	50	..	..	..	Clear.	..	..	..
	0	15	747.90	29.382	42.5	40.6	39.8	.249	87.	65	..	..	.3	Cu-s.	..	..	..
	2	15	747.60	29.374	43.5	41.2	...	.251	85.	65	1	..	1.0	Overcast.	..	..	..
	4	15	747.50	29.368	44.2	41.9	...	.257	87.	52	..	..	1.0	Overcast.	..	..	..
	6	15	747.90	29.382	44.8	42.3	...	.259	83.5	34	..	..	.9	S., Cu.	..	..	..
	8	15	748.30	29.399	48.2	45.	...	.279	82.5	110	..	..	.3	Cu., Ci-cu.	..	112	..
	10	15	748.35	29.395	50.6	43.1	...	.211	69.3	115	1.0	..	.3	Cu.	..	135	..
	12	15	748.35	29.393	51.6	43.6	...	.190	63.	120	2.0	..	.8	Cu.	..	135	..
	14	15	748.10	29.381	52.5	46.	...	.254	65.	117	2.2	..	.6	Cu	..	157	..
	16	15	748.70	29.404	50.5	43.5	...	.222	67.	100	1.8	..	1.0	Cu., Ci-cu.	..	..	..
	18	15	749.60	29.442	49.	46.	...	.233	70.	120	1	..	1.0	Cu.	..	..	..
	20	15	750.55	29.483	47.5	42.5233	69.5	105	2	..	1.0	Overcast.
	22	15	750.60	29.488	46.	41.5240	77.5	90	2.1	..	1.0	Overcast.

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DAILY METEOROLOGICAL OBSERVATIONS.

October.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
22	0 15	12.1	750.25	29.478	43.3	40.5	...	.238	80.	85	1	..	.3	Stratus?	..	..	..
	2 15	11.5	749.90	29.467	43.	40.	...	.230	83.	75	..	..	.3	Cu. and S.	..	..	..
	4 15	11.6	750.15	29.475	41.3	39.2	41.	.234	86.	73	+	..	.3	Cu. and S.	..	..	..
	6 15	10.8	750.55	29.496	40.4	38.3	...	.226	87.5	96	..	..	.1	..	..	..	..
	8 15	11.3	751.50	29.530	44.	40.5	70.	.230	84.5	120	..	..	.7	Cu. and Ci. in Hor.	..	..	..
	10 15	12.1	751.80	29.537	46.8	41.1	...	.211	77.	135	8	..	.8	Cu., Ci.	..	135	..
	12 15	12.7	751.60	29.527	47.7	43.2	...	.223	75.5	110	3	..	.6	Cu.	..	112	..
	14 15	13.	752.00	29.542	49.3	44.	...	.245	73.	105	2	..	1.0	Cu.	..	112	..
	16 15	12.8	752.85	29.577	47.9	41.4	...	.205	71.	135	1	..	1.0	Cu.	..	112	..
	18 15	12.2	754.30	29.637	45.8	42.	...	.240	74.2	145	..	..	1.0	Cu.	..	112	..
	20 15	12.	755.00	29.665	43.2	40.4	...	.237	80.2	128	..	..	1.0	Cu.	..	112	..
	22 15	11.4	755.60	29.692	42.9	38.9	...	.209	78.	135	..	..	1.0	Cu.	..	112	..
23	0 15	10.4	755.95	29.710	39.4	37.3	...	.217	85.	131	..	..	.3	S., Cu.	..	..	..
	2 15	10.2	756.10	29.715	40.5	38.	...	.218	85.	90	..	..	1.0	Cu. and S.	..	..	..
	4 15	9.9	756.40	29.728	40.2	38.	...	.221	85.9	95	..	..	.8	Cu.	..	..	..
	6 15	9.4	756.80	29.747	40.4	38.3	...	.226	86.5	69	..	..	1.0	Cu., S.	..	..	..
	8 15	9.5	757.25	29.765	41.6	39.2	...	.230	86.7	78	..	..	1.0	Cu.	..	..	..
	10 15	10.3	757.15	29.757	47.	42.5	...	.288	80.	90	..	..	.8	Ci., Cu.	..	..	..
	12 15	11.2	756.30	29.719	48.	42.	...	.216	75.5	90	2	..	.8	Ci., Cu., Ci-cu., N.	..	90	..
	14 15	12.5	755.70	29.690	49.7	43.7	...	.212	68.7	90	6	..	.9	Ci., Cu., Ci-cu., N.	..	90	..
	16 15	12.4	755.10	29.666	48.3	43.	...	.234	71.2	75	..	..	.7	Ci., Cu., Ci-cu., N.	..	90	..
	18 15	12.1	755.50	29.683	45.	41.	...	.229	78.2	37	..	..	1.0	Ci., Cu., Ci-cu., N.	..	90	..
	20 15	11.7	755.85	29.699	45.	41.5240	80.8	10	1.0	Cu., Ci-cu.
	22 15	12.2	755.50	29.683	43.2	40.5239	84.2	10	Ci-s. at Hor.

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DAILY METEOROLOGICAL OBSERVATIONS.

OCTOBER.]

Day.	Hour.	Barometer.			Thermometers, Fahr.			Hygr., Saunures.	Wind.	Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.						1.	2.	3.
25	0	8.8	760.50	29.896	36.6	33.5	....	.175	Dir., degrees. 111	Force, lbs. . . .	.7	Cu., Ci., S. ....	..	..	..
	15	8.2	760.35	29.892	35.	30.9	....	.151	104	.2	.3	Ci., S. ....	..	..	..
	4	7.8	761.45	29.938	33.2	29.7	30.5	.149	110	.1	..	Clear .....	..	..	..
	6	6.9	763.00	30.003	32.8	30.3	....	.163	124	.2	..	Clear .....	..	..	..
	8	7.1	764.80	30.078	36.6	30.5	60.	.127	140	1.2	.1	Small Cu.	157	..	..
	10	7.1	765.40	30.086	36.1	30.1	61.6	.125	150	3.5	.4	Cu.	157	..	..
	12	7.9	765.30	30.089	39.	31.5	65.	.120	140	2.5	.3	Cu. ....	..	..	..
	14	8.3	765.40	30.090	39.	33.7	....	.152	140	3.0	.3	Cu. ....	..	..	..
	16	7.9	766.00	30.117	39.	34.2	....	.160	135	2.1	..	Cu. ....	..	..	..
	18	7.5	766.85	30.153	36.3	32.9	....	.167	115	.4	..	Two Cu. ....	..	..	..
	20	7.	767.60	30.185	33.8	30.9	....	.163	120	..	..	Clear .....	..	..	..
26	0	6.5	768.00	30.203	31.9	29.	27.	.150	90	..	..	Clear .....	..	..	..
	15	5.8	767.85	30.200	30.4	28.4	24.2	.155	76.2	87	..	Clear .....	..	..	..
	2	5.2	767.15	30.174	27.	26.2	22.	.153	74	..	..	Clear .....	..	..	..
	4	4.8	766.80	30.164	27.3	..	22.5	..	74	..	..	Clear .....	..	..	..
	6	3.8	766.50	30.156	28.	..	..	..	47	..	.3	S. ....	..	..	..
	8	4.7	765.80	30.124	33.7	..	..	..	45	..	..	Clear .....	..	..	..
	10	5.9	764.70	30.076	42.3	36.1	72.6	.159	60	1.7	..	Clear .....	..	..	..
	12	5.8	763.50	29.978	47.6	39.6	78.	.170	40	2.8	..	Clear .....	..	..	..
	14	9.	761.15	29.920	50.	41.	67.	.171	40	3.0	..	Haze in Hor. ....	..	..	..
	16	10.	760.50	29.890	50.5	41.3	60.	.172	40	3.0	..	Clear .....	..	..	..
	18	10.	760.75	29.900	44.5	41.	..	.233	30	1.0	..	Clear .....	..	..	..
	20	10.	761.35	29.923	45.	41.5	42.	.228	40	..	..	Clear .....	..	..	..
	22	9.5	762.00	29.951	43.	40.	38.8	.230	40	Clear

OCTOBER.]

DAILY METEOROLOGICAL OBSERVATIONS.

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Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaumesure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
27	a. m.																
	0 15	9.	762.85	29.987	41.5	38.4	37.8	.215	78.9	47	..	..	..	Clear .....	..	..	..
	2 15	9.5	763.20	30.000	38.1	35.6	30.	.198	79.5	47	..	..	..	Clear .....	..	..	..
	4 15	8.5	764.40	30.060	35.7	34.8	34.2	.210	91.2	47	..	..	..	Clear .....	..	..	..
	6 15	7.9	765.20	30.085	34.3	33.4	...	.200	91.2	47	..	..	1.0	Foggy .....	..	..	..
	8 15	7.9	766.30	30.129	37.5	35.1	65.	.195	82.5	47	..	..	..	Fog clearing off.	..	..	..
	10 15	8.8	766.60	30.136	52.	44.	76.6	.213	66.5	150	..	..	..	Very hazy, Ci s.	..	..	..
	12 15	10.5	766.25	30.114	55.3	46.	86.	.220	64.	115	..	..	..	Very hazy.	..	..	..
	14 15	12.	766.00	30.097	57.5	46.8	83.	.212	61.3	110	..	..	..	Very hazy.	..	..	..
	16 15	14.	767.00	30.026	...	...	66.4	...	...	125	..	..	..	Very hazy.	..	..	..
	18 15	13.2	768.00	30.069	47.	43.4	...	.257	72.2	170	..	..	..	Very hazy.	..	..	..
	20 15	12.6	769.00	30.213	42.5	40.	35.5	.236	83.	180	..	..	..	Very hazy.	..	..	..
28	22 15	11.5	769.70	30.245	43.8	40.	38.	.221	74.7	245	..	..	..	Clear .....	..	..	..
	0 15	10.2	770.50	30.282	40.6	36.1	36.4	.179	74.9	220	..	..	..	Clear .....	..	..	..
	2 15	9.8	771.00	30.304	38.9	34.6	35.8	.170	75.7	220	..	..	..	Clear .....	..	..	..
	4 15	9.3	771.25	30.316	36.6	32.8	33.	.162	77.	243	..	..	..	Clear .....	..	..	..
	6 15	8.7	772.25	30.358	34.9	32.	...	.166	77.	240	..	..	..	Clear .....	..	..	..
	8 15	8.5	773.10	30.393	36.6	35.2	...	.184	76.2	240	..	..	.3	Ci-s., Ci-cu.	..	..	..
	10 15	8.9	773.50	30.408	43.5	38.6	73.	.196	76.5	250	..	..	.2	Ci-s.,	..	..	..
	12 15	10.1	773.30	30.393	47.	41.5	75.	.216	76.5	255	..	..	..	Hazy in Hor., Ci-s.	..	..	..
	14 15	11.	772.60	30.361	50.5	44.6	70.	.243	76.	245	..	..	.1	Hazy, small Cu. in Hor.	..	..	..
	16 15	11.2	772.50	30.356	49.5	45.5	...	.274	79.	270	..	..	..	Hazy.	..	..	..
	18 15	11.3	773.00	30.375	44.5	42.8	...	.272	88.8	265	..	..	..	Ci.	..	..	..
	20 15	9.9	773.00	30.382	43.6	42.265	90.	237	1.0	Cu.	..	67.	..
	22 15	11.	773.00	30.377	44.8	43.5284	91.2	200	Cu.	..	247	..

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DAILY METEOROLOGICAL OBSERVATIONS.

OCTOBER.]

Day.	Hour.	Date.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
			Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
29	0	15	10.9	772.60	30.362	45.	43.5	45.	.282	80.9	339	..	..	1.0	Cu.	..	..	..
	2	15	10.9	772.45	30.356	44.4	43.2	43.8	.281	92.9	339	..	..	.7	Cu.	..	..	..
	4	15	10.8	772.70	30.366	45.3	45.2	..	.315	93.2	240	..	..	1.0	Cu. in S.	..	..	..
	6	15	11.	772.45	30.355	46.7	45.7	..	.311	93.	286	..	..	1.0	Cu. and S.	..	90	..
	8	15	11.3	772.70	30.364	51.1	49.1	72.	.339	87.8	300	..	..	.9	Ci-cu., Ci-s.	..	90	..
	10	15	12.9	772.65	30.354	55.5	53.5	86.	.373	85.	0	..	..	.6	Ci., Ci-cu., Ci-s., Cu.	..	..	..
	12	15	14.7	771.55	30.301	59.	53.3	94.	.353	76.	35	..	..	.3	Ci., Ci-cu., Ci-s.	..	..	..
	14	15	16.	770.30	30.245	61.4	54.1	72.	.345	73.	45	..	..	.8	Ci., Ci-cu., Ci-s.	..	..	..
	16	15	17.4	770.25	30.237	59.8	53.5	..	.323	71.2	36	..	..	.2	Ci., Ci-cu., Ci-s.	..	..	..
	18	15	16.2	770.25	30.243	53.	49.4	..	.325	80.	30	..	..	..	A very few Ci.	..	..	..
	20	15	15.6	770.70	30.264	50.4	48.8	42.8	.340	89.7	10	..	..	..	Clear.	..	..	..
	22	15	15.3	770.60	30.262	52.	51.6	..	.387	94.5	13	..	..	1.0	S.	..	..	..
30	0	15	15.1	770.30	30.250	51.8	51.4	..	.387	93.8	14	..	..	1.0	Thick fog.	..	..	..
	2	15	15.	770.25	30.249	51.7	51.4	..	.389	93.8	14	..	..	1.0	Thick fog.	..	..	..
	4	15	14.9	770.20	30.247	52.4	52.4	..	.405	93.5	14	..	..	1.0	Thick fog.	..	..	..
	6	15	14.7	770.45	30.258	52.4	52.4	..	.405	93.5	14	..	..	1.0	Thick fog.	..	..	..
	8	15	14.4	771.00	30.281	53.8	53.3	..	.412	93.5	14	..	..	1.0	Very dark.	..	..	..
	10	15	14.9	771.00	30.279	56.	54.6	..	.421	92.	40	..	..	1.0	S., Ci-s.	..	..	..
	12	15	15.3	770.50	30.258	59.5	57.5	..	.458	89.	20	..	..	1.0	S., Ci-s.	..	..	..
	14	15	16.8	769.80	30.224	60.	57.9	..	.464	89.2	20	..	..	.1	Cu., Ci-s.	..	..	..
	16	15	17.4	770.00	30.227	60.4	58.	..	.462	88.	30	..	..	..	Clear.	..	..	..
	18	15	17.2	770.45	30.246	58.	56.	..	.435	93.2	25	..	1.0	Overcast, N.	..	..	..	..
	20	15	18.	770.85	30.258	53.1	53.4	..	.397	94.	75	..	..	..	Thick fog.	..	..	..
	22	15	16.5	771.25	30.282	50.	49.5	50.	.361	93.7	35	Dense fog.

November.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Date.	Hour.	Barometer.			Thermometers, Fah.			Hygr., Gaussure's	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.	Radiation.		Dir., degrees.	Force, lbs.				1.	2.	3.
1	a. m.															
	0 15	15.5	770.35	30.249	52.	51.6	...	.394	297	...	...	1.0	Cu., S.	...	...	...
	2 15	15.5	769.80	30.228	51.5	51.2	...	.389	297	...	...	1.0	S., Cu., foggy.	...	...	...
	4 15	15.4	769.20	30.205	51.4	51.1	...	.388	275	...	...	.8	S., Cu., foggy.	...	...	...
	6 15	15.3	769.05	30.200	52.	52.	...	.400	275	...	...	1.0	S., foggy.	...	...	...
	8 15	15.1	769.20	30.207	54.6	54.5	...	.435	275	...	...	.7	Very thick fog.	...	...	...
	10 15	17.	768.80	30.183	61.5	60.5	...	.532	35	...	...	.4	Ci., Cu., S.	...	22	...
	12 15	19.	767.60	30.126	69.	63.6	92.5	.589	81.	...	...	.3	Cu., Ci-cu., Ci-s.	...	22	...
	14 15	20.3	766.40	30.073	71.3	63.8	87.	.593	76.	20.8	...	...	Cu., Ci-s.	...	22	...
	16 15	21.	765.70	30.042	68.	60.8	75.	.537	75.2	10.0	...	...	Ci., Cu., Ci-cu.	...	22	...
	18 15	20.1	765.15	30.024	62.5	58.4	...	.496	87.	0.5	...	...	Clear.	...	...	...
	20 15	19.4	764.30	29.994	59.5	57.5	57.	.481	91.1	0.4	...	...	Clear.	...	...	...
	22 15	19.1	763.40	29.959	58.8	57.5	56.6	.481	93.2	30.	...	...	Clear.	...	...	...
	0 15	18.6	762.60	29.931	58.5	57.5	57.8	.470	94.	37.3	...	.7	Clear.	...	...	...
	2 15	18.3	761.25	29.879	59.8	58.1	58.2	.472	93.9	22.	...	...	Cu.	...	45	22
	4 15	18.5	759.90	29.825	62.2	61.1	...	.531	93.5	7.5	...	.5	N., raining.	...	...	...
	6 15	18.7	760.40	29.845	57.5	56.5	...	.454	93.	122 1.2	...	1.0	N., raining.	...	...	...
	8 15	18.2	760.65	29.856	56.4	55.5	...	.440	92.6	29 1.0	.25	1.0	N., raining.	...	...	...
2	10 15	18.	760.35	29.846	59.1	56.6	...	.450	92.	45.	...	1.0	Ci-s., N.	...	...	...
	12 15	19.	759.35	29.801	63.	59.7	102.	.481	82.3	55.	...	...	Cu.	...	45	...
	14 15	20.2	759.00	29.782	63.5	58.3	92.	.281	60.5	100 1.1	...	...	Clear.	...	...	...
	16 15	20.2	759.00	29.782	64.	53.5	85.	.303	59.	90.8	...	...	Clear.	...	...	...
	18 15	19.	759.45	29.805	56.8	49.	...	.285	63.	62.	...	...	Clear.	...	...	...
	20 15	18.2	759.60	29.814	49.	45.	...	.269	76.1	25.	...	...	Clear.	...	...	...
	22 15	17.	759.45	29.815	46.2	42.5	37.	.247	77.7	95.	...	...	Clear.	...	...	...

DAILY METEOROLOGICAL OBSERVATIONS. [1841.]

Date.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.			Dir., degrees.	Force, lbs.				1.	2.	3.
3	a. m.															
	0	16.1	759.40	29.817	46.1	42.6	36.7	78.9	96	..	..	..	Clear	..	..	..
	2	15.4	759.00	29.805	42.	40.	34.8	85.2	96	..	..	..	Clear	..	..	..
	4	15.1	759.00	29.811	39.3	38.3	34.0	91.	96	..	..	..	Few Cu.	..	..	..
	6	15.1	758.80	29.809	37.3	36.8	..	92.	96	..	..	..	Cu., S.	..	..	..
	8	15.1	758.35	29.799	44.6	42.9	..	89.	96	..	..	..	Ci cu., Ci-s.	..	45	..
	10	15.2	757.80	29.768	52.7	48.1	91.5	77.3	10	..	..	..	Ci., Cu., Ci-s.	..	45	..
	12	15.2	756.00	29.687	59.	49.	82.	62.	10	..	..	..	Ci-cu., Ci-s.	..	..	..
	14	15.2	754.40	29.618	60.2	48.8	77.	59.	10	2	..	..	Clear	..	..	..
	16	15.6	753.60	29.586	58.1	48.6	76.	60.	60	..	..	..	Ci., Cu., Ci-s.	..	..	..
	18	15.4	753.60	29.589	..	..	..	67.2	0	..	..	..	Cu., dark.	..	..	..
	20	15.3	753.85	29.605	46.5	43.	..	76.8	90	..	..	..	Clear	..	..	..
4	0	14.8	753.40	29.589	45.5	43.5	..	87.2	330	..	..	..	Cu., Ci-cu.	..	..	..
	2	13.8	752.50	29.558	46.7	44.2	..	88.	282	..	..	..	Cu., Ci-cu.	..	..	..
	4	13.3	751.90	29.536	45.4	43.5	..	89.2	281	..	..	..	Cu., Ci-cu.	..	..	..
	6	13.	751.90	29.538	44.2	43.	..	92.4	125	..	..	..	Cu.	..	..	..
	8	12.	751.55	29.529	44.5	42.5	..	90.8	247	..	..	..	Cu.	..	..	..
	10	11.5	751.80	29.542	44.5	44.	..	94.5	185	..	..	..	S. Ci-s.	..	..	..
	12	12.	750.75	29.498	46.8	44.8	..	88.3	190	..	..	..	Cu., Ci-s., S.	..	..	..
	14	11.1	750.20	29.478	45.8	43.5	..	87.3	150	4	..	..	Cu., Ci s., N., slight rain.	..	..	..
	16	10.	749.80	29.464	41.	40.	..	92.	130	2.5	..	..	Cu., N., rain.	..	..	..
	18	9.5	750.95	29.515	38.2	37.	..	91.4	139	4.0	..	..	Cu., N., rain.	..	..	..
	20	9.	752.00	29.559	39.	37.	..	110	2.5	..	..	..	Cu., N.	..	..	..
	22	8.6	753.00	29.599	39.8	37.	..	82.8	120	2.0	..	..	N., very dark.	..	..	..
		753.25	29.612	40.8	37.	..	78.5	120	2.2	..	..	Cu., N.	..	..	..

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

NOVEMBER.]

Date.	Hour.	Barometer.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.			Dir., degrees.	Force, lbs.				1.	2.	3.
5	0 15	8.3	753.30	29.615	40.7	36.6	.199	79.2	100 2.1	2.1	.5		Cu., Ci s., very dark.	..	..	..
	2 15	8.7	751.20	29.650	38.1	35.	.187	80.	95 1.4	1.4	.1		Cu.....	..	..	..
	4 15	8.2	755.00	29.682	38.5	35.	.183	78.5	102 .3	.3	.4		Cu.....	..	..	..
	6 15	7.6	755.80	29.718	38.2	34.8	.182	79.	109 .2	.2	.8		Cu.....	..	..	..
	8 15	8.2	757.90	29.760	41.	37.	.193	77.5	95 .1	.1	.1		Ci., Cu.....	..	..	..
	10 15	9.	757.50	29.776	44.6	39.1	.194	73.	100 1.0	1.0	1.0		Cu., Ci-cu., Ci-s.	..	135	..
	12 15	9.	757.60	29.780	44.8	39.4	.198	72.8	100 1.2	1.2	.9		Cu., Ci-cu.	..	112	..
	14 15	9.7	757.50	29.774	47.	40.	.186	68.	120 1.4	1.4	.9		Cu.....	..	135	..
	16 15	9.9	758.00	29.792	46.3	40.	.193	69.3	110 1.5	1.5	.2		Cu.....	..	..	..
	18 15	9.8	759.50	29.852	42.8	40.	.233	74.7	105 1.0	1.0	.3		Cu.....	..	..	..
	20 15	9.5	759.95	29.871	43.5	39.5	.215	73.8	112 .2	.2	1.0		N? Cu?	..	..	..
	22 15	9.2	760.40	29.890	41.	37.5	.203	75.	63 1.5	1.5	.1		A few Ci-s.	..	..	..
6	0 15	9.	760.50	29.894	39.9	35.8	.182	75.6	79 .2	.2	.2		Ci., Cu.....	..	..	..
	2 15	8.4	760.30	29.890	38.1	33.7	.163	74.9	106 1.0	1.0	.1		Clear.....	..	..	..
	4 15	8.2	760.85	29.912	39.3	34.8	.170	75.	125 2.0	2.0	.1		Light Ci., Cu	..	..	..
	6 15	7.7	761.60	29.944	39.	35.9	.194	73.3	99 2.0	2.0	.6		Ci., Cu., S., N.	..	..	..
	8 15	7.8	762.75	29.987	42.	36.5	.173	72.3	130 1.7	1.7	.8		Ci-cu., Cu	..	112	..
	10 15	8.	763.65	30.023	44.	37.7	.173	69.5	130 2.5	2.5	.9		Cu.....	..	112	..
	12 15	9.2	763.80	30.028	46.	39.	.177	67.5	145 3.3	3.3	.5		Cu.....	..	..	..
	14 15	10.5	764.20	30.033	46.5	39.	.171	65.3	140 2.7	2.7	.2		Cu.....	..	..	..
	16 15	10.7	765.20	30.071	45.6	38.3	.167	65.3	135 2.5	2.5	..		Clear	..	..	..
	18 15	10.	766.60	30.130	41.5	37.8	.204	68.2	145 ..	..	..		Clear	..	..	..
	20 15	9.4	767.10	30.152	38.7	35.	.181	71.	148		Clear
	22 15	8.4	767.00	30.153	37.	33.8	.176	70.	145		Clear

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DAILY METEOROLOGICAL OBSERVATIONS.

NOVEMBER.]

Day.	Hour.	Barometer.			Thermometers, Fah.			Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.		Dir., degrees.	Force, lbs.				1.	2.	3.
8	y.															
	0 15	6.5	766.30	30.136	35.	33.5	34.9	.193	86.8	148	..	.3	S., Ci-s.	..	..	..
	2 15	6.1	765.65	30.111	37.	35.	42.4	.200	86.4	59	..	1.0	Very dark	..	..	..
	4 15	6.7	765.30	30.094	37.	30.	..	.219	89.6	113	..	.02	Raining quite hard	..	..	..
	6 15	6.7	763.75	30.033	38.	37.	..	.227	92.8	351	..	.09	Raining moderately	..	..	..
	8 15	6.7	762.90	30.000	41.2	40.6	..	.263	93.	350	..	.06	N., raining	..	..	..
	10 15	7.1	762.60	29.986	43.	41.6	..	.264	90.8	28	..	.07	N., raining	..	..	..
	12 15	7.9	760.10	29.985	45.6	44.5	..	.297	86.6	33	..	1.0	Cu., N	..	..	..
	14 15	8.4	759.80	29.870	46.	44.5	..	.292	89.3	80	..	.04	N., raining	..	90	..
	16 15	9.	761.00	29.918	47.7	45.7	..	.300	88.	80	..	1.0	Cu., Ci-cu., Ci-s.	..	..	..
9	18 15	9.6	763.00	29.989	48.5	46.	..	.298	86.	145	.2	..	Clear	..	..	..
	20 15	9.6	764.00	30.039	47.5	44.	..	.265	81.2	160	..	..	Clear	..	..	..
	22 15	9.6	765.20	30.076	45.5	42.	44.8	.244	75.9	170	.2	..	Clear	..	..	..
	0 15	9.3	766.25	30.119	41.1	37.5	39.	.201	79.9	109	..	..	Clear	..	..	..
	2 15	8.8	768.90	30.148	38.1	35.2	37.3	.290	80.3	191	..	..	Clear	..	..	..
	4 15	8.2	768.45	30.211	35.2	32.9	33.7	.180	82.	202	..	..	Clear	..	..	..
	6 15	7.6	769.55	30.259	33.7	31.3	30.6	.170	83.5	198	..	..	A few S.	..	..	..
	8 15	7.7	770.70	30.304	39.3	36.	61.3	.204	78.2	190	..	.7	Light Ci-s. and Ci-cu.	..	..	..
	10 15	9.	771.60	30.331	41.3	36.3	72.	.175	74.	230	1	.6	Ci., Ci-cu.	..	113	..
	12 15	10.8	771.50	30.320	44.1	38.7	82.	.191	72.5	250	..	.3	Ci., Cu.	..	..	..
10	14 15	11.8	771.30	30.306	46.3	40.3	78.	.199	71.2	260	..	.2	Cu., Ci.	..	247	..
	16 15	11.3	771.65	30.323	45.	40.5	..	.218	74.5	265	..	1.0	Cu., Ci-s., Ci-cu.	..	..	..
	18 15	10.8	772.55	30.361	43.5	41.4	..	.244	80.	285	..	1.0	Cu.	..	..	..
	20 15	10.3	773.15	30.387	39.5	38.	..	.239	84.8	288	..	..	Cu. at Hor.	..	..	..
22	15	9.7	774.00	30.423	39.5	37.5	..	.219	87.	270	Clear

November.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.								1.	2.	3.
10	h. m.																
	0 15	9.2	773.80	30.417	39.2	36.6	39.2	.205	84.7	238	..	..	.5	Cu., Ci-cu.	..	..	..
	2 15	9.1	773.60	30.409	37.4	35.4	37.2	.202	86.9	238	..	..	.5	Cu.	..	..	..
	4 15	8.5	773.85	30.422	34.9	33.3	34.2	.191	88.	245	..	..	.7	Cu., S.	..	..	..
	6 15	6.2	774.25	30.449	35.	33.5	..	.193	86.	240	..	..	1.0	Ci-cu., Ci., S., Ci-s.	..	..	..
	8 15	6	774.75	30.470	36.1	34.5	..	.200	89.	270	..	..	1.0	Ci-cu., Ci-s.	135	..	..
	10 15	7.7	774.75	30.461	38.5	36.2	..	.205	87.3	255	..	..	1.0	Ci-cu., Ci-s.	..	..	..
	12 15	7.8	773.90	30.428	41.5	38.7	..	.221	85.	260	..	..	1.0	Cu., Ci-cu., Ci-s.	..	..	..
	14 15	8.	773.00	30.390	42.	39.2	..	.225	84.5	245	..	..	1.0	Cu., Ci-cu., Ci-s.	..	..	..
	16 15	8.2	773.10	30.393	40.5	36.8	..	.230	88.	240	..	..	1.0	Ci-s., raining.	..	..	..
11	18 15	8.1	773.20	30.397	40.	37.5	..	.214	88.	235	..	..	1.0	Ci-s., raining.	..	..	..
	20 15	8.	773.50	30.410	38.8	37.	..	.218	88.	260	..	..	1.0	N., raining	..	..	..
	22 15	8.	773.00	30.390	38.	36.4	..	.215	89.5	255	..	..	1.0	N., raining	..	..	..
	0 15	7.6	772.75	30.394	38.	36.1	..	.208	86.7	256	..	..	.9	Cu., Ci-s.	..	..	..
	2 15	7.6	772.20	30.364	37.2	34.5	..	.187	85.1	256	..	..	.8	Ci-s.	..	..	..
	4 15	7.4	771.70	30.343	36.8	33.7	..	.188	83.2	280	..	..	1.0	Cu.	..	..	..
	6 15	7.	771.20	30.326	34.5	32.6	..	.182	86.	258	..	..	1.0	Ci-cu. ? S.	..	..	..
	8 15	7.	771.20	30.328	35.5	33.5	..	.187	86.3	245	..	..	1.0	Ci., Ci-cu., Ci-s.	157	..	..
	10 15	7.	770.80	30.310	38.	35.5	..	.197	86.	255	..	..	1.0	Ci., Ci-cu., Ci-s.	..	..	..
	12 15	8.2	768.90	30.228	42.5	39.2	..	.219	81.	255	..	..	1.0	Ci., Ci-cu., Ci-s.	..	..	..
	14 15	9.	767.40	30.165	44.	40.	..	.218	79.	255	..	..	1.0	Ci., Ci-cu.	..	..	..
	16 15	9.2	766.60	30.134	43.5	40.7	..	.239	80.5	100	..	..	1.0	Ci., Ci-cu.	..	..	..
	18 15	9.5	765.70	30.097	42.7	40.6	..	.244	84.	100	..	..	1.0	Ci., Ci-cu.	..	..	..
	20 15	9.4	764.70	30.058	42.5	40.5	..	.246	85.2	100	..	..	1.0	..	..	..	..
	22 15	9.4	762.95	29.989	42.	40.5	..	.252	87.3	100	..	..	1.0	..	..	..	..

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

November.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Rausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature,	Obs'd height,	Corr. height,	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
12	h. m.																
	0 15	9.	761.35	29.927	42.1	40.1	....	.242	87.1	58	..	..	1.0	Cl-s., Cu., N.	..	..	..
	2 15	9.6	759.45	29.850	42.	41.	....	.263	88.3	57	..	..	1.0	N., raining.	..	..	..
	4 15	9.4	757.15	29.760	43.	42.3	....	.278	94.	15	..	.03	1.0	Very dark.	..	..	..
	6 15	9.7	755.45	29.694	44.8	44.3	....	.301	94.	15	..	..	1.0	Cu., S., N.	..	..	..
	8 15	10.	753.60	29.619	46.5	45.8	....	.315	93.7	25	..	..	1.0	Cu., N.	..	..	..
	10 15	10.2	752.80	29.587	47.	46.2	....	.319	93.	60	2	.12	1.0	N., raining hard.	..	..	..
	12 15	10.4	751.00	29.515	48.6	48.	....	.342	93.	80	1	.08	1.0	N.	..	67	..
	14 15	11.8	750.30	29.476	55.	51.	....	.341	82.	120	..	..	1.0	Broken Cu.	..	112	..
	16 15	12.	750.10	29.472	52.6	49.2	....	.325	83.	120	2	.01	1.0	Cu., Ci-cu., N.	..	112	..
	18 15	12.	750.40	29.483	51.	44.8	....	.243	69.2	113	6	..	1.0	A very few Ci-cu.	..	..	..
	20 15	11.8	751.10	29.511	50.5	43.	....	.209	60.8	135	1.5	..	1.0	A very few Ci-cu.	..	..	..
13	22 15	11.1	751.15	29.517	46.5	40.5	....	.202	63.	135	6	..	1.0	Clear.	..	..	..
	0 15	10.4	750.70	29.504	41.7	37.1	34.7	.188	66.2	130	..	..	..	Clear.	..	..	..
	2 15	10.	750.60	29.501	42.5	38.	....	.195	71.	129	..	..	1.0	Ci-s., N.	..	..	..
	4 15	9.5	751.55	29.541	39.6	37.	....	.209	81.5	109	2.0	..	.3	Cu.	..	..	..
	6 15	8.3	752.10	29.568	39.2	35.4	37.2	.182	76.6	123	1.4	..	..	Clear.	..	..	..
	8 15	8.7	752.50	29.583	41.5	37.	....	.188	74.5	90	1.0	..	.9	Cu.	..	157	..
	10 15	9.4	752.75	29.589	44.6	38.	....	.172	69.5	115	2.2	..	.6	Cu.	..	112	..
	12 15	10.	752.20	29.564	46.6	39.6	....	.183	67.	135	4.5	..	.7	Ci., Ci-cu., Cu.	..	..	..
	14 15	10.	752.20	29.584	46.4	38.6	....	.165	65.5	135	2.4	..	.8	Cu., Ci-cu.	..	185	..
	16 15	10.1	753.35	29.609	46.	38.5	....	.167	64.	125	2.3	..	.4	Cu., Ci-cu.	..	..	..
	18 15	10.	754.70	29.669	45.	39.	....	.188	64.3	135	1.5	..	.2	Cu.	..	..	..
	20 15	9.5	755.25	29.687	42.4	35.8	....	.173	68.	119	2	..	..	Cu.	..	..	..
	22 15	9.	755.55	29.700	40.5	35.2	....	.164	69.	98	1	..	.1	Cu., Ci-cu.	..	..	..

November.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

Date.	Hour.	Barometer.			Thermometers, Foh.		Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.			Dir., degrees.	Force, lbs.				1.	2.	3.
15	h. m.	9.2	750.15	29.488	38.2	33.1	.150	71.	129	.2	..	..	Clear.....	..	..	..
	0 15	8.4	749.50	29.467	35.	30.2	.139	75.9	100	..	..	..	Clear.....	..	..	..
	2 15	7.6	749.15	29.454	35.6	32.1	.161	76.	94	..	.4	..	Ci-s, S.....	..	..	..
	4 15	7.	749.20	29.459	35.	33.	.133	78.	75	..	..	..	Few Cu.....	..	..	..
	6 15	7.2	748.70	29.439	36.5	32.5	.158	77.5	70	..	..	..	Ci, Cu, Ci-cu.....	..	..	..
	8 15	8.2	748.50	29.428	41.2	36.	.172	74.	100	1.4	..	1.0	Cu, Ci-cu.....	..	112	..
	10 15	7.8	748.25	29.419	43.1	38.9	..	168	70.	110	4.2	..	Cu, Ci-cu.....	..	135	..
	12 15	8.1	748.90	29.444	42.5	36.	..	167	70.	135	4.2	1.0	Cu.....	..	..	..
	14 15	8.1	750.25	29.497	41.5	37.	..	188	69.9	135	3.5	..	Cu, N.....	..	..	..
	16 15	7.3	751.75	29.559	37.5	34.	..	175	73.	135	2.5	..	A few Ci-s.....	..	..	..
	18 15	6.9	752.70	29.599	36.	33.5	..	182	74.	45	2.2	..	Clear.....	..	..	..
	20 15	6.3	752.70	29.601	35.6	33.	..	178	74.	120	2.3	..	Clear.....	..	..	..
	22 15	5.6	752.55	29.599	34.6	30.4	..	146	71.4	102	2.8	..	A few Ci-s in NW.....	..	..	..
	0 15	5.2	752.65	29.605	35.8	31.2	35.1	148	71.7	130	1.5	..	Ci-s.....	..	..	..
	2 15	4.9	754.20	29.667	34.5	29.7	..	136	68.9	115	4.5	.8	Cu.....	..	..	..
	4 15	4.4	755.00	29.701	34.2	30.5	..	152	70.4	126	4.5	..	Cu.....	..	..	..
	6 15	4.6	755.50	29.720	34.7	29.8	..	135	68.	140	3.0	..	Cu.....	..	..	..
	8 15	5.	755.70	29.728	37.5	31.8	..	141	66.	140	5.0	.2	Cu.....	..	..	..
	10 15	6.	755.30	29.705	40.7	33.3	59.	126	64.2	140	5.0	..	Cu.....	..	..	..
	12 15	7.	755.40	29.728	42.2	37.5	61.	114	60.	140	4.5	..	A few small Cu.....	..	..	..
	14 15	6.8	757.30	29.780	38.5	34.5	..	189	59.2	115	3.5	..	Clear.....	..	..	..
	16 15	6.4	757.50	29.790	37.5	34.	..	173	68.	90	1.5	..	Clear.....	..	..	..
	18 15	6.	757.35	29.786	36.	33.	..	175	73.	80	..	..	Clear.....	..	..	..
	20 15	6.	757.35	29.786	36.	33.	..	173	75.	80	..	..	Clear.....	..	..	..
	22 15	6.	757.35	29.786	36.	33.	..	173	75.	80	..	..	Clear.....	..	..	..

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

NOVEMBER.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Hygr., Sausure's.	Wind.		Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.						1.	2.	3.
95	17	5.6	757.40	29.799	36.4	33.1	43.9	73.9	100	2	..	Clear.	..	..	..
	0 15	5.4	757.50	29.794	34.	31.6	43.7	77.2	56	..	.1	S., Ci-s.	..	..	..
	2 15	5.4	757.95	29.814	35.5	31.5	43.7	74.5	79	..	..	Clear.	..	..	..
	4 15	5.	757.75	29.808	34.	31.2	43.7	75.7	63	1	.3	Cu.	..	..	..
	6 15	4.6	757.75	29.808	34.	31.2	43.7	75.7	63	1	.3	Cu.	..	..	..
	8 15	5.	757.75	29.808	37.5	33.8	..	72.	90	..	.3	Ci-cu., Ci-s.	..	113	..
	10 15	5.3	757.90	29.811	40.	34.	..	70.	90	.8	1.0	Ci-cu., Ci-s.	..	..	..
	12 15	6.	756.10	29.785	42.8	35.5	..	67.	70	.5	.9	Ci cu., Ci-s.	..	..	..
	14 15	6.7	755.65	29.716	47.	38.	..	61.	80.3	..	.4	Ci., Ci-cu., Ci-s.	..	..	..
	16 15	7.7	755.40	29.700	46.	37.	..	61.	85	2.2	.2	Ci., Ci-cu., Ci-s.	..	..	..
18	18 15	7.6	755.75	29.714	44.	40.4	..	65.	90	2	.6	Cu., Ci-cu	..	..	..
	20 15	7.6	756.00	29.723	44.5	40.	..	228	100	1	1.0	Very dark.	..	..	..
	22 15	7.7	756.30	29.735	46.	41.5	..	214	110	1.5	1.0	Very dark.	..	..	..
	0 15	7.7	756.45	29.741	42.2	38.2	..	203	94	3	1	Ci-s.	..	..	..
	2 15	7.8	756.65	29.749	40.6	37.	..	198	76.4	..	.6	Ci-s., very dark.	..	..	..
	4 15	7.7	756.80	29.755	37.8	36.3	..	215	83	..	1.0	?	..	..	..
	6 15	7.4	757.90	29.789	37.	35.9	..	86.	97	..	1.0	Cu.	..	..	..
	8 15	7.7	758.40	29.818	37.5	34.6	..	83.	260	..	1.0	Cu.	..	..	..
	10 15	7.1	758.85	29.839	38.5	35.5	..	80.3	240	..	.9	Cu.	..	..	..
	12 15	7.7	758.00	29.802	41.7	37.7	..	76.2	245	..	1.0	Ci., Ci-cu., Ci-s.	..	..	..
96	14 15	8.4	758.00	29.799	43.5	39.6	..	77.	345	..	1.0	Ci-cu., Ci-s.	..	..	..
	16 15	8.7	758.50	29.818	42.2	37.7	..	76.3	220	..	1.0	Ci-cu., Ci-s.	..	..	..
	18 15	8.3	758.75	29.829	39.4	36.5	..	77.2	195	..	1.0	Ci-cu., Ci-s.	..	..	..
	20 15	8.	759.90	29.876	38.	34.	..	77.	225	..	1.0	Dark.	..	..	..
	22 15	7.7	760.30	29.893	36.5	33.5	..	76.	280	..	1.0	Dark.	..	..	..

[1841.

DAILY METEOROLOGICAL OBSERVATIONS.

November.]

Day.	Hour.	Barometer.			Thermometers, Fah.			Hygr., Gauss's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.		Dir., degrees.	Force, lbs.				1.	2.	3.
19	h. m.	7.	760.60	29.910	31.6	31.6	...	196	94.	240	1	1.0	N., snowing*	...	...	...
	0 15	6.9	760.00	29.886	31.8	31.9	...	198	91.	297	...	1.0	N., very dark.	...	...	...
	2 15	6.5	759.65	29.874	30.5	30.5	...	189	94.	254	...	1.0	N., very dark.	...	...	...
	4 15	4.2	759.05	29.861	30.7	30.3	...	184	91.	267	...	1.0	N.	...	...	...
	6 15	2.7	758.50	29.846	31.6	30.	...	168	84.	270	1	1.0	N.	...	...	...
	8 15	3.	758.40	29.841	31.6	31.	...	185	91.5	260	...	1.0	N., raining.	...	...	...
	10 15	4.	756.60	29.768	32.3	31.8	...	192	92.5	260	...	1.0	N., drizzling rain.	...	...	...
	12 15	4.	755.00	29.703	33.4	32.7	...	196	93.	260	...	0.9	N., raining.	...	...	...
	14 15	4.2	755.00	29.702	36.2	36.	...	228	94.5	260	1.6	1.0	N., raining.	...	...	...
	16 15	4.8	753.60	29.645	40.8	40.5	...	266	95.	270	1.2	1.0	N., raining.	...	...	...
	18 15	5.2	753.25	29.528	39.1	38.9	...	252	94.	215	1.5	1.0	N., raining.	...	...	...
20	0 15	5.4	753.60	29.642	36.8	36.2	...	224	92.5	265	1.1	1.0	N., raining.	...	...	...
	2 15	5.2	753.00	29.618	36.5	36.	...	224	81.9	245	2.5	1.0	S., N., drizzling	...	...	...
	4 15	5.2	752.85	29.613	37.5	36.5	...	223	88.3	257	2.5	1.0	Very dark.	...	...	...
	6 15	5.6	753.80	29.648	37.5	36.7	...	226	91.	237	1.8	1.0	N., raining.	...	...	...
	8 15	5.6	755.00	29.695	37.	36.5	...	228	92.	215	3	1.0	N., raining.	...	...	...
	10 15	5.8	756.40	29.749	38.1	37.1	...	228	90.3	225	2	1.0	N.	...	...	...
	12 15	6.3	757.80	29.802	41.5	39.	...	235	91.6	180	1	1.0	N.	...	...	...
	14 15	7.	758.40	29.823	41.5	39.	...	238	87.	190	...	1.0	N.	...	180	...
	16 15	7.3	759.90	29.890	41.5	40.	...	247	87.	175	1	1.0	N.	...	180	...
	18 15	7.1	761.15	29.929	40.5	39.5	...	249	91.3	175	...	1.0	N.	...	180	...
	20 15	7.1	762.30	29.974	40.8	39.5	...	246	88.2	165	...	1.0	N., Cu.	...	...	...
	22 15	7.3	763.15	30.007	40.5	39.	...	238	87.5	167	...	1.0	N., Cu.	...	...	...

* Not registered.

[1841.

DAILY METEOROLOGICAL OBSERVATIONS.

NOVEMBER.]

Date.		Barometer.			Thermometers, Fah.			Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.		Dir., degrees.	Force, lbs.				1.	2.	3.
22	0 15	7.5	763.60	30.024	41.	39.6	...	60.9	323	...	...	1.0	Ci., Ci-a.	...	...	...
	2 15	7.6	763.00	30.000	41.9	40.	...	91.4	332	...	...	1.0	N., (drizzling.)	...	...	...
	4 15	7.6	762.40	29.977	42.3	42.	...	94.	331	...	...	1.0	N., (drizzling.)	...	...	...
	6 15	7.7	761.30	29.933	43.4	43.2	...	93.4	328	...	.01	1.0	Cu.	...	...	...
	8 15	8.2	759.60	29.862	45.8	45.6	...	93.	325	...	.02	1.0	S., N.	...	...	...
	10 15	8.8	758.65	29.831	47.3	47.	...	93.	325	...	.02	1.0	N., rain.	...	...	...
	12 15	9.	757.10	29.761	48.8	48.5	...	93.2	15	...	.07	1.0	N., moderate rain.	...	...	...
	14 15	9.8	755.00	29.676	49.6	49.5	...	93.3	0	...	.04	1.0	N., S., rain.	...	...	...
	16 15	10.3	753.90	29.630	57.6	57.5	...	94.	0	...	.05	1.0	N., S., rain.	...	...	...
	18 15	11.7	753.70	29.615	58.1	57.9	...	93.2	16	1.0	.20	1.0	N., S., (slight rain)	...	...	...
	20 15	12.4	752.70	29.578	58.6	58.5	...	93.5	0	6	.12	1.0	N., S., rain.	...	...	...
	22 15	13.5	752.25	29.549	59.3	58.8	...	93.2	45	1.2	...	1.0	N., S., rain.	...	...	...
	0 15	14.5	753.20	29.562	57.3	55.5	...	89.	109	1.4	.08	1.0	S., N., dark.	...	...	...
	2 15	14.5	754.40	29.680	54.9	50.	...	76.3	127	...	...	1.0	N., very dark.	...	...	...
	4 15	18.9	755.40	29.671	53.	51.	...	74.	135	1	...	.5	Cu.	...	...	...
	6 15	13.7	757.30	29.746	49.3	46.	...	74.4	114	1	...	.5	S.	...	...	...
23	8 15	13.	758.65	29.800	48.3	42.3	...	73.	150	...	...	...	A little Ci-a. in S. Hor.	...	...	...
	10 15	14.	759.75	29.841	49.	43.5	...	71.2	180	...	...	...	Ci., Ci-a. in S.	...	...	...
	12 15	15.1	759.20	29.814	51.8	42.1	...	62.	110	5	...	...	Ci., Ci-a. in S.	...	...	...
	14 15	15.3	758.90	29.802	51.8	42.7	...	61.3	75	8	...	...	Ci., Ci-cu.	...	90	...
	16 15	14.7	756.90	29.805	49.6	45.	...	64.	80	...	...	...	Ci., Ci-cu.	...	...	...
	18 15	13.7	759.25	29.823	48.5	44.	...	67.2	83	...	...	...	Cu., Ci cu.	...	...	...
	20 15	13.	759.00	29.816	44.1	41.8	...	76.3	55	...	...	...	Ci cu.	...	...	...
	22 15	12.2	759.25	29.830	42.1	41.	...	78.	65	...	...	.4	Ci., Ci-a.	...	...	...
	0 15	12.2	759.25	29.830	42.1	41.	...	78.	65	...	...	.4	Ci., Ci-a.	...	...	...
	2 15	12.2	759.25	29.830	42.1	41.	...	78.	654	Ci., Ci-a.

November.]

DAILY METEOROLOGICAL OBSERVATIONS.

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Date.		Barometer.			Thermometers, Fah.			Hygr., Saunre's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.		Dir., degrees.	Force, lbs.				1.	2.	3.
24	A. m.															
	0 15	11.3	759.10	29.828	43.1	38.1	...	.191	89	...	...	...	Clear.	...	...	...
	2 15	10.8	759.30	29.863	43.6	36.6	39.	.157	125	...	...	...	A few Ci-s. in W.	...	...	...
	4 15	10.3	760.55	29.891	39.6	31.8	34.	.166	70.5	114	...	...	Clear.	...	...	...
	6 15	9.6	761.65	29.937	37.6	34.	30.4	.174	72.	138	...	...	A few Ci-s. in N.	...	...	...
	8 15	9.5	763.00	29.989	41.	39.3	...	.139	71.5	140	...	...	A few Ci-s.	...	...	...
	10 15	10.3	763.70	30.014	...	...	...	...	...	...	...	...	Clear.	...	...	...
	12 15	11.8	763.05	29.980	45.	38.	...	.168	65.	150	...	...	Ci., Ci-cu. in Hor.	...	...	...
	14 15	12.7	762.75	29.965	46.9	38.9	...	.164	63.6	105	...	...	Ci., Ci-cu.	...	...	...
	16 15	12.	763.20	29.986	45.5	40.	...	.202	67.	115	...	...	Ci., Ci-cu., Ci-s.	...	...	...
	18 15	11.3	764.35	30.035	43.	39.	...	.210	69.1	107	...	...	Ci., Ci-cu., Ci-s.	...	...	...
	20 15	11.1	764.55	30.044	42.5	39.1	...	.218	69.2	60	...	...	Ci., Ci-cu., Ci-s.	...	...	...
25	22 15	10.5	764.75	30.055	38.	36.	...	.208	76.	70	...	...	Ci., Ci-cu., Ci-s.	...	...	...
	0 15	9.7	764.30	30.041	38.	34.2	...	.173	78.	69	...	...	Ci-cu.	...	...	...
	2 15	9.1	764.35	30.045	37.	33.9	...	.178	78.9	227	...	...	Ci-cu., Ci-s.	...	...	...
	4 15	8.6	764.25	30.044	38.	34.5	...	.179	78.5	249	...	...	N.	...	...	...
	6 15	8.	763.80	30.039	38.	34.5	...	.179	78.	248	...	...	N., rain.	...	...	...
	8 15	7.8	764.10	30.042	36.4	35.2	...	.210	91.	249	...	...	N., rain.	...	...	...
	10 15	7.5	763.20	30.008	37.	36.5	...	.228	92.5	255	...	...	N., S., rain.	...	...	...
	12 15	7.4	761.60	29.946	38.7	38.4	...	.247	92.5	210	...	...	N., S., rain.	...	...	...
	14 15	7.2	758.00	29.805	39.8	39.5	...	.257	92.5	240	...	...	N., rain.	...	...	...
	16 15	7.4	767.00	29.765	41.5	41.	...	.268	95.	210	...	...	N., rain.	...	...	...
	18 15	7.6	766.00	29.734	41.5	40.7	...	.263	93.8	200	...	...	N., rain.	...	...	...
	20 15	7.7	764.70	29.674	41.6	41.4	...	.276	93.5	195	...	...	N., rain.	...	...	...
	22 15	8.	753.50	29.624	42.7	42.4	...	.284	93.	200	...	...	N., rain.	...	...	...

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

November.]

Day.	Date.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
26	0	8.1	752.30	29.578	41.8	41.4	...	.274	92.7	190	...	.04	1.0	N., light rain.	...	...	...
	1	7.9	751.80	29.558	40.6	40.2	...	.202	91.	196	...	.01	1.0	N., light rain.	...	...	...
	2	8.3	751.80	29.556	40.5	40.3	...	.265	98.	168	...	.01	1.0	N., light rain.	...	...	...
	4	8.	752.00	29.566	39.4	39.2	...	.255	92.8	166	...	.01	1.0	N., light rain.	...	...	...
	6	8.2	751.70	29.553	40.1	39.7	...	.258	92.3	210	...	.01	1.0	N., S.	...	...	...
	8	8.3	752.10	29.568	42.	41.6	...	.276	92.	125	...	...	1.0	N., S.	...	...	...
	10	9.	751.15	29.527	45.8	45.1	...	.308	91.	30	...	...	1.0	N., S.	...	...	...
	12	10.	751.00	29.516	47.7	47.	...	.329	91.	335	...	...	1.0	N., S.	...	...	...
	14	10.	751.40	29.532	46.8	46.3	...	.321	92.	235	...	...	1.0	N., S.	...	...	...
	16	10.6	752.50	29.574	46.	45.5	...	.314	92.	345	...	.06	1.0	N., S., rain.	...	...	...
27	18	11.	763.55	29.612	46.	45.5	...	.314	92.	65	...	.01	1.0	N., S., rain.	...	...	...
	20	11.2	755.65	29.695	41.5	39.8	...	.244	87.	125	...	...	1.0	N., S., Ci-e.	...	...	...
	22	11.6	758.65	29.730	35.7	33.	...	.176	80.9	108	...	...	1.0	N., Ci-e.	...	...	...
	0	10.5	758.75	29.819	32.7	30.1	...	.160	82.2	110	...	...	1.0	Ci-cu., Ci-s.	...	...	...
	2	9.7	759.70	29.860	32.2	29.3	...	.152	75.5	110	...	...	1.0	Ci-cu., S.	...	...	...
	4	9.1	761.10	29.917	31.5	28.3	...	.143	75.	95	...	...	1.0	Ci-cu., S., Cu.	...	...	...
	6	7.5	763.60	29.985	30.5	26.9	...	.129	70.	100	...	...	9	Cu.	...	...	...
	8	7.3	763.30	30.013	31.5	26.8	...	.117	66.5	100	...	...	7	Cu., Ci.	...	112	...
	10	7.8	764.30	30.050	30.	25.5	...	.112	67.5	120	...	...	3	Cu.	...	157	...
	12	8.	765.35	30.090	28.8	25.	...	.116	66.3	150	...	...	4	Cu.	...	180	...
28	14	6.5	766.15	30.130	30.	26.	...	.120	66.	150	...	...	...	Clear.	...	...	...
	16	5.5	767.30	30.179	28.	26.	...	.141	68.	156	...	...	...	Clear.	...	...	...
	18	4.5	768.75	30.242	26.	24.6	...	.142	70.	156	...	...	...	Clear.	...	...	...
	20	3.7	768.70	30.244	26.	23.5	...	.122	71.	160	...	...	...	Clear.	...	...	...

[1841.

DAILY METEOROLOGICAL OBSERVATIONS.

NOVEMBER.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Bausenue's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.			Dir., degrees.	Force, lbs.				1.	2.	3.
29	0	15	764.15	30.076	...	...	...	...	89.2	205	1.5	...	1.0	N., snowing.	...	...	...
	2	15	763.30	30.042	...	...	...	...	89.5	187	1.8	...	1.0	N., snowing.	...	...	...
	4	15	762.45	30.010	...	...	...	...	89.1	176	1.5	...	1.0	N., snowing.	...	...	...
	6	15	762.76	30.023	...	...	...	...	89.2	189	1.2	...	1.0	N., snowing.	...	...	...
	8	15	762.30	30.006	23.	22.5	...	...	89.2	160	1	...	1.0	N., snowing.	...	...	...
	10	15	761.75	29.984	24.3	23.7	...	...	87.	170	2	...	1.0	N., snowing.	...	...	...
	12	15	761.00	29.949	27.	25.8	...	...	84.5	145	3	...	1.0	N., snowing.	...	...	...
	14	15	761.30	29.959	27.	26.	...	...	85.	120	4	...	1.0	N., snowing.	...	...	...
	16	15	761.85	29.982	26.8	25.4	...	...	82.2	125	1.2	...	1.0	N., snowing.	...	...	...
	18	15	763.00	30.029	26.	24.5	...	...	79.	130	1.2	...	1.0	N., snowing.	...	...	...
	20	15	763.70	30.058	24.5	23.3	...	...	77.7	135	1	...	1.0	N., snowing.	...	...	...
	22	15	764.65	30.101	23.5	22.	...	...	75.	130	1	...	1.0	N., snowing.	...	...	...
	0	15	765.75	30.145	22.	...	...	...	76.	128	...	...	1.0	N., snowing.	...	...	...
	2	15	766.30	30.168	22.	...	...	...	74.3	118	...	...	1.0	N., snowing.	...	...	...
	4	15	767.30	30.210	17.7	...	...	...	77.	108	...	...	1.0	N., snowing.	...	...	...
	6	15	768.15	30.239	16.	...	...	...	78.	230	...	...	1.0	N., snowing.	...	...	...
	8	15	768.85	30.269	22.4	21.2	...	...	75.	115	...	...	1.0	N., snowing.	...	...	...
	10	15	769.55	30.292	25.6	23.	...	...	73.	120	1	...	1.0	N., snowing.	...	...	...
	12	15	769.15	30.269	28.5	25.5	...	...	71.	135	6	...	1.0	N., snowing.	...	...	...
	14	15	769.00	30.256	30.5	28.5	...	...	69.2	150	...	...	1.0	N., snowing.	...	...	...
	16	15	769.10	30.262	30.	27.8	...	...	70.	75	...	...	1.0	N., snowing.	...	...	...
	18	15	769.50	30.281	26.5	25.	...	...	76.8	77	...	...	1.0	N., snowing.	...	...	...
	20	15	769.75	30.293	20.8	20.3	...	...	81.	77	...	...	1.0	N., snowing.	...	...	...
	22	15	770.10	30.310	16.1	16.	...	...	88.	77	...	...	1.0	N., snowing.	...	...	...
30	0	15	766.30	30.168	22.	...	...	...	74.3	118	...	...	1.0	N., snowing.	...	...	...
	2	15	767.30	30.210	17.7	...	...	...	77.	108	...	...	1.0	N., snowing.	...	...	...
	4	15	768.15	30.239	16.	...	...	...	78.	230	...	...	1.0	N., snowing.	...	...	...
	6	15	768.85	30.269	22.4	21.2	...	...	75.	115	...	...	1.0	N., snowing.	...	...	...
	8	15	769.55	30.292	25.6	23.	...	...	73.	120	1	...	1.0	N., snowing.	...	...	...
	10	15	769.15	30.269	28.5	25.5	...	...	71.	135	6	...	1.0	N., snowing.	...	...	...
	12	15	769.00	30.256	30.5	28.5	...	...	69.2	150	...	...	1.0	N., snowing.	...	...	...
	14	15	769.10	30.262	30.	27.8	...	...	70.	75	...	...	1.0	N., snowing.	...	...	...
	16	15	769.50	30.281	26.5	25.	...	...	76.8	77	...	...	1.0	N., snowing.	...	...	...
	18	15	769.75	30.293	20.8	20.3	...	...	81.	77	...	...	1.0	N., snowing.	...	...	...
	20	15	770.10	30.310	16.1	16.	...	...	88.	77	...	...	1.0	N., snowing.	...	...	...
	22	15	770.10	30.310	16.1	16.	...	...	88.	77	...	...	1.0	N., snowing.	...	...	...
	0	15	766.30	30.168	22.	...	...	...	74.3	118	...	...	1.0	N., snowing.	...	...	...
	2	15	767.30	30.210	17.7	...	...	...	77.	108	...	...	1.0	N., snowing.	...	...	...
	4	15	768.15	30.239	16.	...	...	...	78.	230	...	...	1.0	N., snowing.	...	...	...
	6	15	768.85	30.269	22.4	21.2	...	...	75.	115	...	...	1.0	N., snowing.	...	...	...
	8	15	769.55	30.292	25.6	23.	...	...	73.	120	1	...	1.0	N., snowing.	...	...	...
	10	15	769.15	30.269	28.5	25.5	...	...	71.	135	6	...	1.0	N., snowing.	...	...	...
	12	15	769.00	30.256	30.5	28.5	...	...	69.2	150	...	...	1.0	N., snowing.	...	...	...
	14	15	769.10	30.262	30.	27.8	...	...	70.	75	...	...	1.0	N., snowing.	...	...	...
	16	15	769.50	30.281	26.5	25.	...	...	76.8	77	...	...	1.0	N., snowing.	...	...	...
	18	15	769.75	30.293	20.8	20.3	...	...	81.	77	...	...	1.0	N., snowing.	...	...	...
	20	15	770.10	30.310	16.1	16.	88.	77	1.0	N., snowing.
	22	15	770.10	30.310	16.1	16.	88.	77	1.0	N., snowing.

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DAILY METEOROLOGICAL OBSERVATIONS.

Dresden.]

Date.		Barometer.			Thermometer, Fah.		Force of vapor, ins.	Dew point, Fah.	Hyg., Saunure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.									1.	2.	3.
1	A. M.																
	0 15	0.1	770.10	30.315	14.	13.9	9.3	8 A. M.: .103	93.2	77			3	Ci-cu, Ci-s.			
	2 15	0.2	770.15	30.319	16.5	16.5		(D. 16.9) .114	89.7	77			1.0	Ci-cu, Ci-s.			
	4 15	0.3	770.05	30.315	21.5	21.5		(A. 20.2) .137	92.6	53			1.0	Ci-cu, Ci-s.			
	6 15	1.	770.35	30.327	16.5		21.8	9 A. M.: .	92.	53				Foggy			
	8 15	1.	771.00	30.353	15.1			(D. 18.4) .	93.	53				Fog passing off, no clouds			
	10 15	0.	771.50	30.371	23.6	23.3		(A. 18.1) .143	87.	53				Clear			
	12 15	2.2	770.85	30.334	31.	28.5		3 P. M.: .150	77.	45				Clear			
	14 15	4.	770.40	30.308	34.3	31.1		(D. 22.8) .160	74.3	35				Ci. in S., very little.			
	16 15	4.	770.50	30.312	33.	31.7		(A. 34.6) .184	77.	50	.1		.4	Ci., Ci-cu.			
	18 15	3.5	770.50	30.314	29.5	28.5		9 P. M.: .166	80.	50				Clear			
2	0 15	3.2	770.45	30.313	31.	30.	29.9	(D. 25.) .176	84.5	50			3	Ci.			
	2 15	2.9	770.40	30.313	27.	25.4	26.	(A. 28.5) .140	87.	50				Ci.			
	4 15	2.2	769.80	30.254	26.6	26.	24.5	3 A. M.: .155	91.9	47				Clear			
	6 15	1.6	769.60	30.288	25.	24.8	23.7	(D. 21.3) .152	91.9	48				Clear			
	8 15	1.2	769.05	30.269	23.3	23.1	20.3	(A. 24.4) .144	92.5	48				Clear			
	10 15	0.8	768.95	30.268	20.5		10.5	9 A. M.: .	94.6	48				Foggy			
	12 15	0.8	769.60	30.293	22.1			(D. 24.) .	92.	48				Foggy, S.			
	14 15	2.1	769.65	30.289	28.8	28.		(A. 24.5) .165	87.	48			.4	A little Ci.			
	16 15	3.8	769.30	30.265	34.5	31.7		3 P. M.: .169	79.	48			1.0	Light Ci-s.			
	18 15	4.5	768.75	30.242	36.6	33.6		(D. 26.3) .188	77.5	44				Ci-s., S., N.			
	20 15	5.	768.65	30.235	33.5	31.5		(A. 35.8) .176	78.	45			1.0	Ci-s., S., N.			
	22 15	4.4	768.40	30.228	31.5	29.9		9 P. M.: .169	81.	45			1.0	?			
		4.	768.00	30.214	30.3	29.		(D. 24.8) .166	84.	45			.6	?			
		3.6	768.10	30.220	28.9	28.		(A. 29.) .164	86.	45				?			

December.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.

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Date.	Hour.	Barometer.			Thermometer, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Sky covered, 10ths.	Rain, inches.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir. points.	Force, lbs.				1.	2.	3.
3	A. M.																	
	0 15	3.1	767.55	30.201	30.1	29.1	...	.170	3 A. M.: (D. 26.)	89.8	45	...	...	1.0	S., foggy	...	...	...
	2 15	3.3	767.15	30.183	32.5	30.7	...	.178	(A. 32.4)	84.2	249	...	...	1.0	Slight fog	...	...	...
	4 15	3.4	766.55	30.160	32.3	30.8	...	.176	(A. 32.4)	84.	257	...	...	1.0	N., raining	...	...	...
	6 15	3.3	765.55	30.120	32.7	32.	...	.192	9 A. M.: (D. 35.8)	92.5	250	...	.03	1.0	N., raining	...	...	...
	8 15	3.3	763.70	30.047	35.3	35.	...	.319	(A. 36.5)	93.5	250	...	.11	1.0	N., raining	...	...	...
	10 15	4.	762.20	29.986	37.7	37.4	...	.238	(A. 36.5)	93.5	280	...	.06	1.0	N., raining	...	...	...
	12 15	4.7	768.60	29.841	40.4	40.3	...	.266	3 P. M.: (D. 44.5)	93.	250	...	.30	1.0	N., dense fog	...	...	...
	14 15	5.2	755.20	29.705	44.5	44.5	...	.309	(D. 44.5)	93.	250	...	.40	1.0	N., dense fog	...	...	...
	16 15	6.	751.85	29.569	45.8	45.8	...	.323	(A. 44.5)	95.	280	...	.75	1.0	N., dense fog	...	...	...
	18 15	7.	747.85	29.408	52.5	52.4	...	.404	9 P. M.: (D. 54.)	93.3	285	...	.26	1.0	N., dense fog	...	...	...
4	20 15	8.2	747.15	29.373	57.	56.5	...	.460	(D. 54.)	93.	320	...	.04	1.0	Very dark	...	...	...
	22 15	9.8	747.45	29.379	52.5	51.8	...	.389	(A. 55.)	92.	0 1.5	...	...	1.0	Very dark	...	...	...
	0 15	10.4	748.00	29.439	50.2	49.4	...	.357	3 A. M.: (D. 44.2)	92.6	5 1.8	...	...	1.0	N., Ci-s.	...	...	...
	2 15	10.6	748.30	29.449	49.	47.9	...	.335	(D. 44.2)	89.5	44 1.2	...	...	1.0	S., Ci-s.	...	...	...
	4 15	10.9	746.55	29.379	47.9	47.4	...	.337	(A. 48.4)	90.	32 1.2	...	...	.8	Ci., S.	...	...	...
	6 15	10.8	745.35	29.335	44.9	44.7	...	.309	9 A. M.: (D. 38.8)	90.	50	...	.02	1.0	Foggy	...	...	...
	8 15	11.	745.55	29.297	46.6	45.8	...	.314	(D. 38.8)	90.	40	...	...	1.0	N., scud.	...	90	...
	10 15	11.	745.60	29.299	47.8	47.3	...	.225	(A. 47.8)	69.	75 1.3	...	...	.1	Ci-cu. in SE.	...	...	...
	12 15	12.3	744.20	29.238	51.	43.	...	.205	3 P. M.: (D. 39.)	63.	75 3.5	...	...	.3	Cu.	...	90	...
	14 15	12.8	743.70	29.216	50.9	43.8	...	.224	(D. 39.)	61.2	62 4.0	...	...	1.0	Cu.	...	90	...
	16 15	12.5	744.25	29.239	48.3	41.	...	.194	(A. 49.3)	61.8	93 2.6	...	...	.9	Cu.	...	90	...
	18 15	11.	746.25	29.324	44.	38.	...	.180	9 P. M.: (D. 30.)	63.	110 5.0	...	...	1.0	Very dark	...	...	...
	20 15	10.	746.50	29.339	42.5	36.6170	(D. 30.)	64.	110 3.5	1.0	Very dark
	22 15	9.3	746.45	29.340	41.5	37.168	(A. 41.5)	63.	90 2.5	1.0	Very dark

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DAILY METEOROLOGICAL OBSERVATIONS.

December.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, lbs.	Dew point, Fah.	Hygr., Gannett's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
6	a. m.																	
	0	4.	749.00	29.466	31.5	30.5	...	.150	3 A. M.:	70.	115	3.1			Clear, a little S. in E...			
	2	3.8	749.40	29.482	34.3	30.1	60.8	.144	(D. 22.3)	71.	110	2.5		.2	S., Cu., Ci.			
	4	3.8	749.50	29.486	31.6	30.3	59.	.145	(A. 34.5)	70.5	110	1.7		.4	Cu., S.			
	6	3.4	750.65	29.535	33.8	30.	57.2	.148	9 A. M.:	71.	123	1.8		.1	S.			
	8	3.5	751.75	29.577	34.5	30.8	...	.154	(D. 23.3)	72.5	115	1.0		.1	Ci., Ci-cu in Hor.			
	10	5.	752.25	29.590	36.4	33.5	...	.155	(A. 35.7)	70.	115	2.3		.4	Ci., Cu., Ci-cu.			
	12	5.	752.00	29.580	39.3	34.	...	.157	3 P. M.:	68.5	125	2.3		1.0	Cu., Ci-cu, N.		135	
	14	5.	752.40	29.596	40.	34.6	...	.157	(D. 23.4)	67.3	150	1.5		1.0	Cu., Ci-cu, N.		135	
	16	5.2	753.40	29.634	39.	34.5	...	.168	(A. 39.7)	68.8	142	3		1.0	Cu., Ci-cu, N.			
	18	5.3	754.80	29.682	36.8	34.	...	.183	9 P. M.:	69.3	155	...		1.0	Cu., Ci-cu, N.			
	20	5.	755.50	29.718	34.5	31.5	...	.166	(D. 24.)	67.5	175	1			Ci cu. at Hor.			
7	22	4.7	756.45	29.756	32.5	30.5	...	.169	(A. 33.5)	69.2	155	1			Clear.			
	0	3.8	756.90	29.778	31.	28.	...	.143	3 A. M.:	71.	158	...			Clear.			
	2	3.4	757.80	29.816	30.5	27.	29.5	.132	(D. 22.5)	68.5	155	...		.1	Ci., S.			
	4	2.9	758.35	29.836	29.8	25.5	29.3	.115	(A. 30.3)	68.	150	1.5		.1	Ci., S.			
	6	3.4	759.40	29.893	29.	25.2	27.5	.118	9 A. M.:	70.	134	1		.3	Ci., S.			
	8	2.5	761.00	29.946	30.	28.1	...	.121	(D. 15.7)	70.	140	1			A little Ci. in E.			
	10	4.	762.00	29.978	32.	27.2	...	.119	(A. 31.1)	68.	145	1.3			Clear.			
	12	5.3	762.10	29.975	34.	28.8	...	.125	3 P. M.:	67.	150	1.7		.1	Very light Ci.			
	14	5.8	762.40	29.985	35.7	30.2	...	.131	(D. 18.5)	66.	145	5			Clear.			
	16	6.4	763.75	30.035	34.8	31.5	...	.163	(A. 36.2)	66.	125	...			Clear.			
	18	5.7	764.60	30.072	32.3	31.5	...	.188	9 P. M.:	69	120	...			Clear.			
	20	5.3	765.15	30.095	27.3	26.4	23.5	.154	(D. 18.)	71.8	120	...			Clear.			
22	4.	765.80	30.108	27.5	26.5	23.	.154	(A. 28.5)	74.9	120	...			Clear.				

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DAILY METEOROLOGICAL OBSERVATIONS.

December.]

Day.	Hour.	Barometer.			Thermometers, F ^{ah} .			Force of vapor, ins.	Dew point, F ^{ah} .	Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temp ^{erature} , centigrade.	Obs ^d height, millimetres.	Corr ^{ect} height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
9	0	27	765.12	30.107	34.8	23.6	....	.130	3 A. M.: (D. 18.5)	82.	120	..	..	..	Clear	..	..	..
	15	24	765.75	30.133	24.	23.7	19.5	.145	(D. 18.5)	87.4	120	..	..	..	Clear	..	..	..
	24	1.9	766.15	30.151	22.2	21.8	17.3	.134	9 A. M.: (A. 22.7)	89.3	120	..	..	..	Clear	..	..	..
	4	1.9	766.20	30.157	23.2	22.8	18.7	.139	9 A. M.: (A. 22.7)	90.3	120	..	..	..	A little Ci-s. in E.	..	..	..
	6	1.7	766.60	30.170	25.8	25.2	....	.150	(D. 24.3)	90.5	120	..	..	..	Ci-s. in Hor.	..	..	..
	8	4.2	767.20	30.182	32.5	30.6	....	.171	(A. 28.6)	87.	25	..	..	..	Ci.	..	..	..
	10	8	768.50	30.186	38.	34.	....	.168	3 P. M.: (D. 26.3)	76.	45	..	..	..	Light Ci., Ci-cu.	..	..	..
	12	11.3	768.85	30.094	40.5	35.5	....	.169	(A. 40.2)	72.	60	..	..	..	Ci.	..	..	..
	14	13.	765.25	30.063	38.6	35	....	.181	9 P. M.: (D. 28.7)	75.	28	..	..	..	Ci., Ci-cu.	..	..	..
	16	12.1	765.45	30.074	38.	33.5	....	.182	(A. 36.)	79.	25	..	..	..	Questionable, dark.	..	..	..
	18	11.3	764.85	30.055	35.5	33.5	....	.187	(D. 28.7)	82.	20	..	..	..	Questionable, dark.	..	..	..
9	20	11.	764.00	30.022	36.5	34.	....	.186	3 A. M.: (D. 31.)	82.5	20	..	..	..	Questionable, dark.	..	..	..
	22	11.2	763.50	29.963	37.2	35.	....	.197	3 A. M.: (D. 31.)	82.	18	..	..	..	N.	..	..	..
	0	14.	762.10	29.933	37.3	35.1	....	.197	(D. 31.)	83.	19	..	..	..	Ci., Cu. and N.	..	..	..
	2	16.9	761.60	29.900	39.	30.2	....	.200	9 A. M.: (A. 38.2)	81.5	19	..	..	..	N., Ci., Cu.	..	..	..
	4	17.	760.90	29.873	39.3	36.8	....	.203	9 A. M.: (A. 38.2)	82.	19	..	..	..	N., Ci., Cu.	..	..	..
	6	15	760.95	29.872	41.	38.	....	.212	(D. 32.)	81.	16	..	..	..	Cu., Ci-cu., N.	..	..	..
	8	18.5	761.30	29.890	43.4	39.7	....	.221	(A. 41.7)	79.	16	..	..	..	Cu., Ci-cu.	..	..	..
	10	19.3	760.00	29.826	46.	41.5	....	.229	3 P. M.: (D. 36.)	77.	45	..	..	..	Ci., Ci-cu., N.	..	..	..
	12	19.5	759.65	29.811	49.	43.5	....	.237	(D. 36.)	73.	50	..	..	..	Ci., Ci-cu., N.	..	..	..
	14	19.5	759.65	29.811	46.6	43.1	....	.255	(A. 48.)	78.	45	..	..	..	Ci., Ci-cu., N.	..	..	..
	16	19.5	760.50	29.842	46.2	43.	....	.257	9 P. M.: (D. 38.)	73.1	45	..	..	..	Dark.	..	..	..
	18	20.	760.70	29.855	48.5	40.8253	(D. 38.)	81.8	45	Clear
	20	18.	760.80	29.864	40.8	37.	40.	.235	(A. 43.)	84.2	45	Clear

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DAILY METEOROLOGICAL OBSERVATIONS.

December.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
10	A. M.														Clear			
	0 15	17.5	760.80	29.866	39.5	38.3	38.	.236	3 A. M.: (D. 35.)	89.	46				Clear			
	3 15	18.5	760.90	29.865	38.4	37.4	35.2	.330	(A. 39.3)	91.5	45				Clear			
	4 15	19.8	760.40	29.810	36.6	35.8	34.1	.219	9 A. M.: (D. 37.8)	91.	45			.8	Cu., Ci-cu.			
	6 15	18.2	760.20	29.838	36.7	36.		.222	(A. 39.6)	92.	46			1.0	Ci., Cu., N., raining*			
	8 15	18.1	759.60	29.816	36.7	36.2		.242	3 P. M.: (D. 48.2)	90.3	46			1.0	S.			
	10 15	20.3	759.25	29.791	42.	41.		.263		78.	32			1.0	Ci., Ci cu, S.			
	12 15	20.1	756.40	29.680	46.6	44.8		.292		82.	0			1.0	Ci-cu., Ci-s., N.			
	14 15	20.2	754.40	29.601	51.6	51.1		.349	(A. 54.5)	85.2	345			1.0	N., raining*			
	16 15	19.9	753.65	29.533	54.2	51.2		.355	9 P. M.: (D. 50.6)	85.7	0	.5		1.0	Ci-cu., N.			
11	18 15	21.	752.35	29.504	54.5	51.5		.360		92.	355	1.3		1.0	Dark N.			
	20 15	23.5	750.40	29.427	53.	52.5		.402	3 A. M.: (D. 49.6)	92.8	335	.8		1.0	Cu., N.			
	22 15	22.	749.00	29.379	53.5	51.5		.371	(A. 52.)	93.	336			1.0	N., very dark			
	0 15	22.	747.50	29.321	53.5	51.5		.380	9 A. M.: (D. 45.)	88.	67			1.0	Raining very hard			
	2 15	19.4	746.45	29.292	52.	51.2		.312	(A. 48.6)	85.	75	.8		1.0	Cu., Ci-cu.			
	4 15	22.	746.25	29.273	51.8	49.5		.315	3 P. M.: (D. 41.5)	89.	67			1.0	Ci., Cu., Ci cu.	135	67	90
	6 15	21.8	746.60	29.290	49.	47.		.315	(A. 44.7)	78.5	85			1.0	Cu., Ci-cu.			
	8 15	21.7	747.50	29.324	48.6	47.4		.281	9 P. M.: (D. 37.)	74.	120	.1		1.0	Cu., Ci-cu., N.			
	10 15	20.7	747.85	29.343	51.3	46.8		.258		82.5	110	.6		1.0	Cu., Ci-cu., N.			
	12 15	21.	747.80	29.340	51.	45.4		.264		83.2	125	1.3		1.0	Cu., Ci-cu., N.			
12	14 15	21.2	748.25	29.356	45.6	43.		.267		83.2	135	1.3		1.0	Cu., Ci-cu., N.			
	16 15	19.5	749.00	29.389	45.5	43.		.285		81.5	160	2.0		1.0	Cu., Ci-cu., N.			
	18 15	18.8	750.75	29.462	46.5	44.4		.277		77.	160	2.6		1.0	Ci a.			
	20 15	18.3	751.85	29.507	45.5	43.5		.230						.2				
22	15	18.	753.00	29.554	43.	39.4												

* Not sufficient to register.

December.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Day.	Date.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygt., Gauges &c.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
13	h. m.																	
	0 15	14.9	764.30	30.017	34.	32.1	...	.178	3 A. M.:	84.1	205	...	...	...	Clear	...	...	...
	2 15	14.	764.60	30.032	33.6	31.5	31.	.175	(D. 24.6)	84.9	205	...	...	...	Clear	...	...	...
	4 15	15.2	764.50	30.023	31.	30.4	28.3	.180	(A. 31.6)	88.5	205	...	...	...	Cl., Cu., S.	...	...	...
	6 15	15.7	765.10	30.043	30.3	29.4	...	.172	9 A. M.:	89.	205	...	...	...	Cl., Cu., Ci-s.	...	...	...
	8 15	16.	765.65	30.063	34.	32.2	...	.181	(D. 29.8)	86.5	225	...	...	...	Cl., Ci cu.	...	90	...
	10 15	15.9	766.30	30.090	37.2	35.1	...	.198	(A. 35.3)	86.3	225	...	...	...	Cl., Ci-cu.	...	90	...
	12 15	15.5	763.90	30.096	44.5	41.5	...	.245	3 P. M.:	83.	280	...	...	...	Cl., Cu., Ci-cu.	...	...	...
	14 15	18.8	763.10	29.948	47.2	43.2	...	.250	(D. 36.5)	79.	210	...	...	...	Cu., Ci-s, Ci.	...	67	...
	16 15	18.2	762.50	29.928	46.2	42.5	...	.247	(A. 47.5)	81.	270	...	...	...	Cu., Ci-s, Ci.	...	337	...
	18 15	18.5	762.35	29.921	45.	43.5	...	.282	3 P. M.:	84.	270	.2	...	...	Cu., Ci-s, Ci.	...	337	...
14	20 15	18.1	761.15	29.877	43.5	42.	...	.266	(D. 39.)	89.	235	...	...	...	Cu., dark	...	...	...
	22 15	18.4	760.75	29.860	42.2	41.5	...	.271	(A. 43.)	93.	240	...	...	...	Cu., dark	...	...	...
	0 15	18.2	759.15	29.796	43.2	42.5	...	.280	3 A. M.:	93.9	237	...	...	...	N., very dark	...	...	...
	2 15	20.1	757.35	29.718	45.9	45.	...	.304	(D. 42.4)	92.3	243	...	...	...	N., raining	...	...	...
	4 15	21.5	754.85	29.615	49.1	48.3	...	.343	(A. 46.6)	92.5	270	1.0	.05	1.0	Raining hard.	...	...	...
	6 15	21.	754.85	29.617	50.1	49.1	...	.351	9 A. M.:	87.	35	1.3	.29	1.0	Raining hard.	...	...	45
	8 15	21.1	755.75	29.651	47.7	47.2	...	.333	(D. 47.3)	92.	40	...	.12	1.0	Ci-cu, S, N.	...	90	...
	10 15	21.1	756.50	29.680	49.6	47.1	...	.310	(A. 48.2)	86.3	100	...	...	...	Cu.	...	112	...
	12 15	21.3	756.10	29.663	51.7	46.7	...	.277	3 P. M.:	76.2	100	.7	...	...	Cu.	...	112	...
	14 15	22.9	756.40	29.668	52.6	47.6	...	.288	(D. 40.)	75.	100	2.0	...	...	Cu.	...	112	180
	16 15	22.8	757.75	29.722	52.	47.	...	.281	(A. 53.)	73.5	125	.3	...	...	Cu., Ci-cu.	...	180	...
	18 15	21.4	758.85	29.772	50.	46.	...	.281	9 P. M.:	75.	127	...	...	...	A few Ci-cu.	...	...	...
	20 15	20.6	758.85	29.775	44.5	42.4	...	.264	(D. 38.)	79.	127	...	...	...	Clear.	...	...	...
	22 15	21.3	759.35	29.791	44.	42.	...	.261	(A. 45.)	82.	110	...	...	...	Clear.	...	...	...

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

December.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
15	0	15	21.3	760.60	29.840	42.8	42.	37.5	374	83.1	110	..	..	..	Clear	..	..	..
	2	15	20.9	761.50	29.857	42.4	40.	37.9	337	83.	111	..	..	..	Clear	..	..	..
	4	15	19.	761.70	29.894	39.9	38.	31.5	325	86.	111	..	..	..	Cl., Cu. at Hor.	..	..	..
	6	15	18.3	761.95	29.907	39.3	37.5	30.	323	88.	139	..	..	..	Very light Ci.	..	..	..
	8	15	18.3	763.30	29.955	39.5	37.7	...	324	88.	140	..	..	..	Ci., Ci cu.	112	..	67
	10	15	18.9	763.30	29.956	45.5	42.3	...	350	83.5	170	..	..	..	Ci., Ci cu.	..	..	67
	12	15	19.9	763.70	29.904	49.5	45.	...	364	77.3	200	..	..	..	Ci., Ci cu.	..	..	67
	14	15	22.	762.20	29.899	51.6	46.6	...	376	73.3	200	..	..	..	Cu., Ci cu.	..	..	157
	16	15	21.3	762.20	29.903	48.6	45.6	...	387	79.	200	..	..	..	Ci cu.	..	..	90
	18	15	23.	762.20	29.894	47.	44.5	...	281	82.	200	..	..	..	Cu., Ci cu.	..	..	..
	20	15	23.4	763.50	29.904	46.5	44.3	...	283	84.5	200	..	..	..	Very dark.	..	..	..
	22	15	21.5	762.15	29.900	45.4	43.5	...	278	87.	200	..	..	..	Very dark, Ci cu.	..	..	..
16	0	15	21.	761.15	29.862	44.	42.8	...	278	91.3	202	..	..	..	N., raining.	..	..	..
	2	15	21.6	760.50	29.894	43.4	42.4	...	276	92.7	217	..	..	..	N., slight rain.	..	..	..
	4	15	22.5	759.50	29.790	42.7	41.9	...	273	93.	236	..	..	..	N.	..	..	..
	6	15	22.9	759.25	29.779	43.3	42.8	...	285	93.3	245	..	..	..	N., raining.	..	..	..
	8	15	21.5	758.40	29.755	43.1	42.5	...	281	93.	265	..	..	..	N., Cu.	..	..	..
	10	15	19.7	757.45	29.734	45.5	44.5	...	298	91.5	215	..	..	..	N.	270	..	..
	12	15	20.	755.30	29.638	45.4	44.3	...	295	91.5	215	..	..	..	N., raining.	..	..	..
	14	15	19.8	753.55	29.571	44.5	43.7	...	292	92.	205	1.2	..	..	N., raining.	..	..	..
	16	15	20.7	753.00	29.544	44.5	43.7	...	292	92.5	205	1.7	..	..	N., raining.	..	..	..
	18	15	19.5	749.50	29.412	44.	43.	...	282	91.	200	2.5	..	..	N., Cu., Ci cu.	..	..	..
	20	15	18.6	748.90	29.393	45.	43.4	...	280	88.2	200	7.0	..	..	N., slight rain.	..	..	..
	22	15	17.9	748.10	29.365	42.5	41.5	...	268	91.5	200	4.5	..	..	Slight rain.	..	..	..

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

Deerwarr.]

Day.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
17	0 15	18.	747.00	29.321	40.	39.	...	.244	3 A. M.: (D. 38.5)	90.5	200	4.0	.13	1.0	N., scudding rain	...	...	...
	2 15	17.7	745.45	29.361	39.9	38.8	...	.241	(A. 39.7)	89.3	180	1.7	.04	1.0	N., raining	...	...	...
	4 15	19.2	744.30	29.210	39.	38.2	...	.239	9 A. M.: (A. 39.7)	91.3	180	6.0	.07	1.0	N., raining quite fast	...	...	...
	6 15	19.4	744.25	29.206	36.8	36.	...	.231	9 A. M.: (D. 32.2)	90.5	170	4.5	.12	1.0	Raining	...	...	...
	8 15	20.5	745.40	29.347	33.8	33.3	...	.203	(D. 32.2)	90.2	180	3.5	.33	1.0	Raining	...	...	...
	10 15	19.9	744.75	29.324	33.6	32.7	...	.194	(A. 33.2)	90.	120	3.0	.20	1.0	N., S., rain	...	225	...
	12 15	20.	741.80	29.235	32.	31.7	...	.194	3 P. M.: (D. 26.4)	93.	200	2.0	.09	1.0	N., snowing	...	270	...
	14 15	21.7	744.40	29.202	32.	30.8	...	.179	(A. 28.7)	88.3	183	3.5	.02	1.0	N., snowing	...	...	...
	16 15	19.6	745.80	29.267	26.8	25.6	...	.146	(A. 28.7)	86.5	165	3.5	...	1.0	N., snowing	...	...	...
	18 15	18.5	746.75	29.309	24.	23.5	...	.142	(A. 28.7)	88.	165	2.5	...	1.0	N., snowing	...	...	...
	20 15	16.5	747.00	29.329	20.	19.	...	.115	(A. 28.7)	81.2	165	4.0	...	1.0	N., snowing	...	...	...
18	22 15	14.	747.35	29.354	19.6	18.3	...	.109	(A. 28.7)	77.	145	7.0	...	1.0	N., snowing	...	...	...
	0 15	12.4	747.40	29.384	19.5	18.	...	.103	(A. 28.7)	73.3	145	7.0	...	1.0	N., light snow	...	...	...
	2 15	10.8	748.65	29.421	18.8	17.1	...	.099	(A. 28.7)	75.	160	7.0	...	1.0	N., light snow	...	...	...
	4 15	12.	749.25	29.438	19.	17.5	...	.103	(A. 28.7)	76.	145	6.0	...	1.0	N., light snow	...	...	...
	6 15	14.	750.55	29.480	20.	17.9	...	.099	9 A. M.: (D. 6.1)	74.	140	3.5	...	1.0	N., light snow	...	...	...
	8 15	13.	751.80	29.534	19.3	17.5	...	.100	(D. 6.1)	73.5	145	4.3	...	1.0	Cu., Ci-cu., N.	...	...	...
	10 15	14.1	753.20	29.581	19.	16.7	...	.092	(A. 19.2)	71.	130	4.0	...	1.0	Ci., Cu., Ci cu.	...	...	...
	12 15	12.5	753.00	29.584	20.5	18.	...	.095	(A. 19.2)	69.3	130	4.0	...	1.0	Cu., Ci., Ci-s.	...	...	...
	14 15	14.8	753.60	29.597	23.6	21.	...	.108	(A. 19.2)	68.5	130	4.0	...	1.0	Cu., Ci., Ci-s.	...	...	...
	16 15	14.7	755.40	29.668	24.2	22.3	...	.122	(A. 19.2)	66.5	120	4.0	...	.3	Ci-cu., Ci.	...	...	...
	18 15	15.	757.10	29.732	23.6	20.3	...	.093	9 P. M.: (D. 8.3)	66.3	110	3.5	...	...	Clear	...	...	...
	20 15	15.9	759.10	29.806	23.	20.1	...	.101	(D. 8.3)	66.	165	2.0	...	...	Clear	...	...	...
	22 15	13.9	760.00	29.852	23.	19.6	...	.093	(A. 22.7)	65.	130	2.5	...	...	Clear	...	...	...

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

December.]

Day.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hyg., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Air, degrees.	Force, lbs.				1.	2.	3.
20	A. M.																	
	0 15	15.4	764.75	30.032	27.6	27.	...	.161	3 A. M.: (D 25.3)	79.4	60	2.0	..	.9	Cl. s.	..	..	..
	2 15	16	761.50	30.018	29.6	28.	...	.157	(A. 29.7)	78.	147	..	..	1.0	Cl. s., Ci. cu.	..	..	..
	4 15	16.5	763.95	29.995	29.3	27.5	...	.152	9 A. M.: (D 18.6)	80.	186	..	..	.5	Cl. s.	..	..	..
	6 15	15.6	764.45	30.018	28.	21.9	...	.143	3 P. M.: (A 30.3)	80.	186	..	..	.1	Cl. s., Ci. cu.	..	..	..
	8 15	17	764.75	30.024	27.5	26.	...	.146	(A 30.3)	81.	186	..	..	.3	Cl. s., Ci. cu.	..	..	..
	10 15	18.3	765.10	30.030	33.8	31.3	...	.169	3 P. M.: (D 23.)	68.5	230	..	..	.7	Cl. s.	..	..	..
	12 15	17.3	763.90	29.984	35.7	31.7	...	.156	(A 36.1)	65.3	215	..	..	.8	Cl. s.	..	..	..
	14 15	18	763.30	29.961	36.	32.	...	.158	9 P. M.: (D 28.)	67.	210	..	..	1.0	Cl. s., Ci. cu.	..	..	..
	16 15	18.3	762.50	29.923	33.2	31.5	...	.179	(A 32.8)	71.	250	..	..	1.0	Cl. s., Ci. cu.	..	..	..
	18 15	17.7	763.75	29.941	34.	31.	...	.162	3 A. M.: (D 28.)	74.3	235	..	..	1.0	Cl. s., Ci. cu.	..	..	..
	20 15	17.2	763.75	29.982	33.	31.5	...	.181	3 P. M.: (D 28.)	80.	215	..	..	1.0	Cl. s.	..	..	..
21	0 15	15.9	762.40	29.936	31.9	31.	...	.183	3 A. M.: (D 28.)	83.	215	..	..	.8	Cl. s., Ci. cu.	..	..	..
	2 15	16.7	762.75	29.940	32.2	30.5	...	.172	9 A. M.: (D 25.5)	84.1	255	..	..	1.0	Cl. s., N.	..	..	..
	4 15	16.8	762.35	29.939	32.1	31.	...	.181	3 P. M.: (D 23.)	85.2	222	..	..	1.0	N., rain.	..	..	..
	6 15	18.4	762.45	29.926	31.7	31.5	...	.191	9 A. M.: (D 25.5)	90.5	228	1.0	..	1.0	N., rain.	..	..	..
	8 15	19.1	765.15	30.028	27.	26.1	...	.166	3 P. M.: (D 23.8)	89.3	230	1.4	..	1.0	Cl. s., N.	..	..	..
	10 15	21	767.00	30.093	25.9	25.9	...	.152	(A 27.3)	89.2	235	1.5	..	1.0	Cl. s., N.	..	..	..
	12 15	19.8	767.10	30.103	25.4	24.8	...	.148	3 P. M.: (D 23.8)	89.5	245	..	..	1.0	Cl. s., N.	..	..	..
	14 15	19.3	768.00	30.140	26.	24.6	...	.139	(A 26.)	90.	235	1.2	..	1.0	Cl. s., N.	..	..	..
	16 15	20.1	770.50	30.233	25.7	24.5	...	.140	..	84.7	210	..	..	1.0	Cl. s., N.	..	..	..
	18 15	19.5	771.50	30.276	26.5	24.5	...	.132	..	81.	195	..	..	1.0	N. ? Cl. s.	..	..	..
	20 15	18.1	773.00	30.351	26.5	24.	...	.124	..	75.	215	..	..	1.0	N. ? Cl. s.	..	..	..
	22 15	15.	773.90	30.393	23.	20.8111	..	73.	195	1.0	Cu., Cl. s., Ci. cu.

December.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1841.]

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Day.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Rausmaure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
22	A.	m.																
	0	15	13.9	774.80	30.433	19.7	18.6	...	...	74.	187	...	...	.2	Ci-cu., Ci s. at Hor.	...	...	...
	2	15	13.4	776.40	30.499	16.3	15.6	23.	...	73.8	202	...	...	...	Clear.	...	...	...
	4	15	14.7	777.45	30.533	15.8	15.4	16.1	...	75.	205	...	...	...	Clear.	...	...	...
	6	15	13.7	778.30	30.573	14.5	13.5	15.9	...	74.8	200	...	...	.1	Ci-s. at E. and S. Hor.	...	...	...
	8	15	15.3	779.60	30.616	15.4	14.5	14.5	...	72.5	235	...	...	.1	Ci., Ci-cu. at Hor.	...	...	...
	10	15	16.	780.80	30.659	16.	14.5	13.4	...	72.7	250	...	...	.2	Light Ci.	...	...	...
	12	15	15.3	779.60	30.616	18.5	16.3	12.3	...	72.	250	...	...	.1	Light Ci., Ci cu. in S.	...	...	...
	14	15	18.1	780.00	30.617	20.4	18.3	12.3	...	69.3	250	...	...	.2	...	...	...	...
	16	15	18.3	780.55	30.637	20.5	17.9	...	...	68.	245	...	...	.2	Ci., Ci-cu.	...	...	...
	18	15	17.	780.65	30.649	19.4	17.	...	...	69.9	260	...	...	.3	Ci., Ci-s.	...	...	...
	20	15	15.6	780.85	30.663	17.	15.	...	...	69.5	245	...	...	.9	Cu., Ci., Ci-cu.	...	...	...
23	22	15	15.6	780.75	30.660	17.5	16.2	...	...	72.1	210	...	...	1.0	Ci-s., Ci.	...	...	...
	0	15	13.6	779.25	30.610	17.6	16.4	...	...	76.9	225	...	...	1.0	Ci-cu., Ci-s.	...	...	...
	2	15	13.7	779.00	30.599	18.	17.	...	...	78.9	245	...	...	1.0	Ci-cu., Ci-s.	...	...	...
	4	15	11.	776.60	30.518	18.8	18.3	...	...	83.	258	...	...	1.0	Ci-cu., (?)	...	...	...
	6	15	12.8	776.30	30.498	21.6	20.9	...	...	86.	260	...	...	1.0	N., (?) very dark.	...	...	...
	8	15	13.7	775.75	30.473	23.8	23.2	...	...	88.5	245	...	...	1.0	Ci-cu., Ci-s.	...	...	...
	10	15	15.3	774.45	30.407	28.	27.1	...	...	89.5	245	...	...	1.0	N., Ci-s.	...	...	...
	12	15	17.7	772.50	30.323	34.	32.7	...	...	93.	265	...	...	.03	N., Ci-s., S., rain.	...	...	...
	14	15	19.3	770.10	30.323	38.	37.	...	...	92.	265	...	...	.09	N., S., rain.	...	...	...
	16	15	20.	768.35	30.150	40.5	39.5	...	...	92.	275	...	...	.16	N., S., rain.	...	...	...
	18	15	19.4	765.70	30.049	44.	43.	...	...	92.	300	...	...	.09	N., rain.	...	...	...
	20	15	18.	763.00	29.949	47.5	47.	...	...	92.	315	...	...	.13	N., rain.	...	...	...
	22	15	16.8	758.50	29.779	50.9	50.	...	...	92.	340	...	...	.70	N., rain.	...	...	...

[1841.

DAILY METEOROLOGICAL OBSERVATIONS.

December.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.				1.	2.	3.
27	a. m.																	
	0 15	15.8	769.50	30.215	27.7	21.1	...	.129	3 A. M.: (D. 19.8)	73.2	142	..	..	..	Clear.....	..	..	..
	2 15	16.3	769.85	30.226	21.5	20.7	17.9	.125	(A. 21.5)	78.2	142	..	..	..	Clear.....	..	..	..
	4 15	16.7	770.20	30.238	21.3	20.5	18.	.124	(A. 21.5)	79.	143	..	..	.2	Ci-s. at Hor.....	..	..	..
	6 15	16.8	769.85	30.226	20.4	20.	16.1	.125	9 A. M.: (D. 17.5)	79.9	143	..	..	.4	Ci-cu, Ci-s, S.....	..	..	..
	8 15	16.6	770.30	30.234	21.8	21.2	...	.129	(A. 22.9)	79.9	143	..	..	1.0	Ci-cu, Ci-s, S.....	..	..	..
	10 15	18.	771.00	30.265	24.5	23.1	...	.131	(A. 22.9)	80.5	143	..	..	1.0	Ci, Ci-s, S.....	..	..	..
	12 15	17.	769.00	30.190	28.	25.7	...	.136	3 P. M.: (D. 24.)	78.7	90	..	..	.9	Ci, Ci-s, Ci-cu.....	..	..	..
	14 15	21.7	769.20	30.175	30.6	28.	...	.147	(D. 24.)	74.	20	..	..	.2	Ci, Ci-s, Ci-cu.....	..	..	..
	16 15	20.	768.95	30.173	28.5	27.	...	.152	(A. 29.2)	76.	20	..	..	1.0	Ci, Ci-s, Ci-cu.....	..	..	..
	18 15	19.7	768.75	30.167	28.5	27.	...	.152	.....	77.8	00	..	..	1.0	S, N, Ci-cu.....	..	..	..
	20 15	18.3	768.75	30.173	29.5	28.	...	.158	.....	80.8	333	..	..	1.0	S, N, Ci-cu.....	..	..	..
28	0 15	18.8	769.00	30.180	29.6	28.4	...	.163	.....	80.8	333	..	..	1.0	S, N, Ci-cu.....	..	..	..
	2 15	19.5	768.00	30.140	29.8	28.6	...	.165	3 A. M.: (D. 28.2)	80.3	333	..	..	1.0	S, N, Ci-cu.....	..	..	..
	4 15	19.	767.85	30.134	29.7	29.	...	.172	(D. 28.2)	80.3	279	..	..	1.0	Ci-s, N.....	..	..	..
	6 15	19.9	768.30	30.147	30.6	29.6	...	.173	(A. 30.4)	80.5	284	..	..	1.0	N.....	..	..	..
	8 15	20.6	767.75	30.125	30.	29.5	...	.177	9 A. M.: (D. 27.8)	83.7	305	..	..	1.0	N.....	..	..	..
	10 15	21.	768.70	30.159	32.6	31.2	...	.173	(A. 31.1)	88.7	265	..	..	1.0	N, snow.....	..	..	..
	12 15	21.2	768.00	30.131	35.7	33.7	...	.180	(A. 31.1)	85.5	285	..	..	1.0	N.....	..	..	..
	14 15	20.7	767.50	30.114	35.	33.	...	.189	3 P. M.: (D. 30.)	83.5	20	..	..	.8	Ci, Ci-cu, Ci-s, S.....	67	..	112
	16 15	20.6	767.65	30.119	33.2	31.8	...	.184	(D. 30.)	86.5	25	..	..	1.0	Ci-s, N.....	..	..	..
	18 15	20.9	768.40	30.149	31.	30.	...	.184	(A. 34.8)	86.5	25	..	..	.3	Ci, Ci-cu.....	..	..	..
	20 15	21.	768.80	30.165	28.5	28.	...	.176	.....	88.9	27	..	..	..	Clear.....	..	..	..
	22 15	19.2	769.00	30.179	26.9	26.5	20.2	.168	.....	90.	32	..	..	..	Clear.....	..	..	..

[1841.]

DAILY METEOROLOGICAL OBSERVATIONS.

DECEMBER.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gaumere's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Radiation.				Dr., degrees.	Force, lbs.				1.	2.	3.
29	A. M.																	
	0 15	19.7	769.10	30.180	27.5	27.	19.7	.162	3 A. M.: (D. 34.9)	90.4	56	..	..	..	Clear.....	..	..	..
	2 15	20.2	770.30	30.224	29.	28.	28.	.163	(A. 28.1)	87.9	145	..	..	.5	Ci-cu., Ci-s.	135	..	..
	4 15	20.2	770.75	30.242	27.6	26.6	..	.154	9 A. M.: (D. 29.2)	88.9	113	..	..	.7	Ci-cu., Ci-s.	135	..	..
	6 15	19.4	770.75	30.246	27.	26.2	..	.154		88.8	113	..	..	1.0	Cu., Ci-s.	135	..	..
	8 15	20.	771.80	30.285	31.	30.	..	.176		80.	70	..	..	.8	Ci., Cu.	112	..	..
	10 15	19.7	773.10	30.338	37.	34.2	56.5	.183	(A. 31.5)	80.	70	..	..	..	Ci.....	..	..	..
	12 15	18.5	771.40	30.276	39.	34.2	70.5	.160	3 P. M.: (D. 25.)	71.5	140	1.	..	.2	Ci., Cu.	90	..	..
	14 15	19.7	772.40	30.310	40.5	35.5	61.	.169	(A. 40.)	69.5	115	..	..	.7	Ci., Ci-s., Ci-cu.	90	..	..
	16 15	20.5	773.20	30.338	39.	35.	..	.176		72.5	145	..	..	.8	Clear.....	..	..	..
	18 15	19.6	774.20	30.381	36.	33.	..	.172		72.5	145	..	..	..	Clear.....	..	..	..
	20 15	19.2	773.60	30.361	33.5	31.	..	.181		77.8	145	..	..	..	Clear.....	..	..	..
	22 15	20.	773.65	30.358	33.	31.5	..	.181		79.3	180	..	..	.9	Light Ci., Ci-s., N.	..	..	..
	0 15	19.2	773.75	30.367	32.6	30.1	..	.160	3 A. M.: (D. 34.9)	79.1	192	..	..	1.0	N., light fog.	..	..	..
30	2 15	20.1	773.70	30.360	33.	31.7	..	.184	(D. 34.9)	80.	192	..	..	1.0	N., light fog.	..	..	..
	4 15	20.6	772.00	30.290	33.1	32.1	..	.189	(A. 33.6)	80.3	192	..	..	1.0	N., Ci-cu.	..	..	..
	6 15	21.5	771.10	30.251	33.	30.7	..	.166	9 A. M.: (D. 28.5)	80.9	218	..	..	1.0	N., Ci-s.	..	..	..
	8 15	19.8	770.00	30.216	33.4	32.2	..	.187	(A. 33.5)	82.	245	..	..	1.0	N., S., Cu.	..	..	..
	10 15	21.	769.15	30.177	33.4	31.8	..	.180		87.2	245	..	..	1.0	N., S., Cu.	..	..	..
	12 15	20.7	767.00	30.094	34.5	34.1	..	.210	3 P. M.: (D. 34.)	93.	190	..	..	.01	N., raining.	..	..	..
	14 15	19.3	765.30	30.034	35.6	34.9	..	.213	(A. 34.9)	92.3	175	..	..	.07	N., raining.	..	..	..
	16 15	19.6	764.50	30.001	35.5	35.	..	.216		92.	175	..	..	.06	N., rain.	..	..	..
	18 15	20.6	764.00	29.976	35.6	35.	..	.215	9 P. M.: (D. 34.)	91.3	180	..	..	.03	N., Ci-s.	..	..	..
	20 15	19.1	763.55	29.965	34.5	34.	..	.208		93.5	175	..	..	1.0	N., S.	..	..	..
	22 15	18.9	764.50	30.004	35.3	35.	..	.213	(A. 34.3)	90.	101	..	..	1.0	Ci-cu., Ci-s.	..	..	..

[1841.

DAILY METEOROLOGICAL OBSERVATIONS.

December.]

Date.	Hour.	Barometer.			Thermometers, Fah.			Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.	
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.	Radiation.				Dir., degrees.	Force, lbs.			1.	2.
31	h. m.															
0	15	19.6	764.80	30.006	34.6	33.5	...	.198	3 A. M.: 3	89.4	96	...	.3	Ci-cu., Ci-s.	...	...
2	15	18.1	764.75	30.019	31.7	33.6	...	.199	(D. 29.) 88.	88.	114	...	.8	Ci-cu., Ci-s.	...	135
3	15	18.1	764.75	30.019	31.7	33.6	...	.199	(A. 35.2) 85.8	85.8	113	...	.9	Ci-cu., Ci-s., Cu, N.	...	...
4	15	18.7	765.10	30.029	34.6	33.1	...	.190	9 A. M.: 89.3	89.3	17	...	.5	Ci-s.	...	...
6	15	18.1	765.30	30.040	31.	30.3	...	.181	(D. 29.) 83.4	83.4	57	...	.6	Ci., Ci-cu.	...	...
8	15	19.4	765.50	30.041	33.	31.	...	.173	(A. 34.4) 83.2	83.2	75	...	.8	Ci-s., Ci.	...	22
10	15	18.	765.30	30.043	35.	33.	64.	.184	3 P. M.: 72.5	72.5	110	.4	.5	Ci., Ci-cu., Cu.	...	...
12	15	16.8	762.75	29.946	38.5	34.1	...	.166	(D. 25.) 70.	70.	115	1.0	1.0	Cu.	...	...
14	15	18.6	762.75	29.937	38.5	35.4	...	.190	...	74.	105	.3	...	Clear.	...	...
16	15	18.2	763.20	29.955	36.5	35.	...	.183	(A. 40.) 73.	73.	90	...	...	A few Ci-cu.	...	...
18	15	17.	763.45	29.972	37.	35.	...	.200	...	75.	90	...	...	Cu., Ci-cu., Ci-s.	...	...
20	15	17.	763.55	29.976	35.5	32.8	...	.175	...	73.	89	...	...	...	...	...
22	15	16.5	764.50	30.017	36.7	34.1	...	.185	...	...	...	...	1.0	...	...	...

MAGNETIC OBSERVATORY,

AT THE

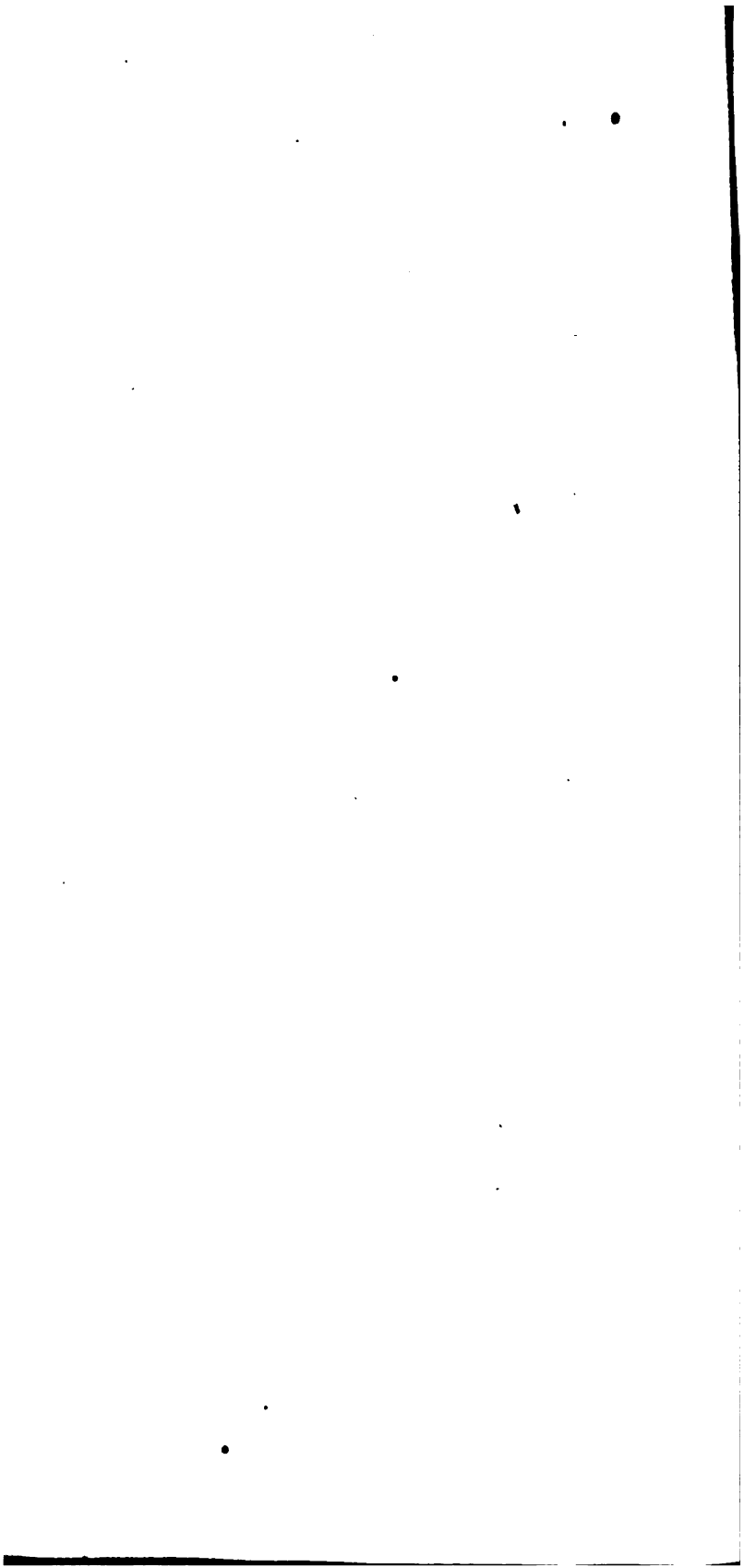
GIRARD COLLEGE, PHILADELPHIA.

METEOROLOGICAL OBSERVATIONS

ON THE

MAGNETIC AND METEOROLOGICAL TERM DAYS,

FROM JANUARY TO DECEMBER, 1841.



JANUARY 20, 21.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

[1841.]

h.	Göttingen time.	Barometer.			Therm's Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, eighths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
22	-2	771.20	30.369	28.3	28.1	.171	.....	93.5	ENE.	1	..	N., snowing fast	8
23	-1	770.60	30.341	30.	30.	.186	.....	93.	ENE.	1	..	N., snowing fast	8
0	-0.5	770.15	30.320	29.5	29.	.174	.....	91.2	ENE.	2	..	N., snowing fast	8
1	-0.4	770.10	30.317	29.	28.5	.171	24.40m.	91.	ENE.	3	..	Snow and hail	8
2	-0.2	769.75	30.304	28.1	27.7	.167	(D. 19.8)	92.	ENE.	3	..	Snow and hail	8
3	-0.1	768.60	30.258	29.	28.5	.171	(A. 27.6)	92.	ENE.	3	..	Snow and hail	8
Means	30.318	29.	.....	.173	.....	92.1	.....	..	..	.....	..
4	0	768.10	30.238	30.1	29.6	.178	.....	91.7	ENE.	3	..	Snow and hail	8
5	0.5	766.50	30.172	30.5	30.	.181	.....	91.7	ENE.	2	..	Snow, hail, and rain	8
6	0.8	764.80	30.104	31.4	31.	.188	.....	93.2	ENE.	..	..	N., raining	8
7	0.9	764.00	30.072	31.5	31.	.187	.....	93.1	ENE.	..	.01	N., raining	8
8	1.	763.30	30.042	31.6	31.2	.190	.....	93.1	ENE.	..	.03	N., raining	8
9	1.5	761.85	29.985	32.3	31.9	.193	.....	94.	ENE.	..	.03	N., raining	8
Means	30.102	31.2	.....	.186	.....	92.8	.....	..	..	.....	..
10	1.3	760.60	29.936	32.	31.8	.196	.....	92.1	ENE.	..	.03	N., raining	8
11	1.7	760.00	29.910	32.5	32	.194	.....	93.	ENE.	..	.04	N., raining	8
12	1.8	758.95	29.869	32.6	32.4	.200	.....	92.7	ENE.	1	.06	N., raining	8
13	ENE.	..	.05	N., raining	8
14	2.	757.50	29.811	33.2	33.	.205	.....	92.	ENE.	..	.08	N., raining	8
15	2.	757.40	29.807	33.4	33.2	.206	.....	95.	NNE.	..	.25	N., raining	8
Means	29.867	32.7	.....	.200	.....	93.	.....	..	..	.....	..
16	2.3	757.00	29.790	33.7	33.5	.208	.....	95.	NNE.	..	.67	N., raining	8
17	2.4	756.60	29.773	34.	33.7	.209	.....	94.5	NNE.	..	.12	N., raining	8
18	2.7	754.75	29.700	-35.1	34.6	.213	.....	93.5	NNE.	..	.10	N., raining	8
19	3.	754.30	29.681	34.7	34.5	.216	.....	93.5	NW.	..	.04	N., raining	8
20	3.	754.30	29.681	34.6	34.3	.213	.....	93.5	NNW.	..	.01	N., raining	8
21	3.4	754.50	29.687	34.6	34.3	.213	.....	94.	NW.	..	.02	N., raining	8
Means	29.719	34.4	.....	.212	.....	94.	.....	..	..	.....	..

FEBRUARY 26, 27.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

[1841.]

h.	Göttingen time.	Barometer.				Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Baume's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.		Dry.	Wet.				Dir. points.	Force, lbs.			
22	8.5	761.40	29.932	46.3	40.8	.....	.210	.....	70.	SW.	..	..	Cl., Ci cu., Ci-s.	7
23	8.6	761.70	29.944	44.	39.	.....	.199	.....	73.	SW.	..	..	Ci-cu.	7
0	9.	761.70	29.942	41.	37.	.....	.193	.....	75.4	SSW.	..	..	Cl., Ci-cu.	8
1	8.8	761.55	29.937	40.2	38.	.....	.221	24.40m.	85.8	S. by W.	..	..	Cl., Ci-cu., N.	8
2	9.	761.20	29.922	39.6	37.6	.....	.221	(D. 36.)	87.	S. by W.	..	..	N.	8
3	9.	761.10	29.918	38.8	37.2	.....	.222	(A. 38.8)	88.3	S. by E.	..	..	N.	8
Means	29.932	41.6	.....	.....	.211	.....	79.9	.....	..	..	.....	..
4	8.7	759.90	29.873	38.3	37.	.....	.223	.....	91.	S.	..	..	N., raining.	8
5	8.7	759.50	29.857	37.7	36.7	.....	.224	.....	93.	S.	..	..	N., raining.	8
6	8.5	758.00	29.798	37.4	36.9	.....	.231	.....	93.7	ESE.	..	..	N., raining.	8
7	8.2	756.85	29.754	38.	37.5	.....	.236	8h. 40m.	93.	SE.	..	..	N., raining.	8
8	8.2	755.65	29.707	38.7	38.5	.....	.249	(D. 39.)	92.3	SSE.	..	..	N., raining.	8
9	8.	754.05	29.647	39.5	39.5	.....	.260	(A. 39.)	92.2	SE. by S.	..	..	N., raining.	8
Means	29.773	38.3	.....	.....	.237	.....	92.5	.....	..	..	.....	..
10	8.5	763.95	29.840	41.	40.8	.....	.270	.....	92.	SSE.	..	..	N., raining.	8
11	8.4	753.00	29.603	42.	41.8	.....	.279	.....	91.5	S.	..	..	N., raining.	8
12	8.6	752.95	29.601	41.9	41.6	.....	.277	.....	91.6	SSW.	..	..	N.	8
13	8.6	752.90	29.599	41.9	41.7	.....	.278	14h. 40m.	91.5	SW.	..	.06	Very foggy.	8
14	8.8	752.70	29.589	41.7	41.6	.....	.279	(D. 40.6)	91.5	SW.	..	..	Very foggy.	8
15	8.9	752.10	29.565	42.	41.9	.....	.281	(A. 42.)	91.5	WSW.	..	..	Very foggy, raining.	8
Means	29.589	41.7	.....	.....	.277	.....	91.6	.....	..	..	.....	..
16	8.9	752.25	29.571	42.2	42.	.....	.281	.....	91.	W.	..	.03	N., raining.	8
17	9.3	752.69	29.583	42.6	42.5	.....	.287	.....	91.	W.	..	..	N., foggy.	8
18	9.1	752.60	29.584	43	42.	.....	.272	.....	89.	W.	..	..	N., Ci-cu.	8
19	9.1	752.50	29.580	42.1	40.8	.....	.257	20h. 40m.	87.6	WNW.	..	.08	N., raining.	8
20	9.	752.85	29.595	42.1	39.5	.....	.231	(D. 37.5)	82.5	WNW.	..	.02	N., Cu., Ci-cu.	7
21	9.3	753.30	29.610	43.5	39.8	.....	.232	(A. 43.5)	78.5	WNW.	..	..	Cl., Ci cu., Ci-s., N.	8
Means	29.587	42.6	.....	.....	.258	.....	86.6	.....	..	..	.....	..

MARCH 24, 25.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

[1841.]

Göttingen time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saussure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
22	14.8	760.20	29.856	54.2	45.7	.182	...	55.5	WNW.	...	..	Clear	..
23	15.	760.40	29.862	57.	47.3	.231	...	57.	SW. by W.	...	..	Clear	..
0	14.7	760.70	29.876	52.3	45.5	.244	...	66.5	SW. by W.	...	..	Clear	..
1	14.6	761.40	29.903	49.4	44.2	.248	2h. 40m.	69.	SW.	...	..	Clear	..
2	14.3	761.90	29.924	49.	42.5	.215	(D. 36.6)	69.3	SW.	...	..	Clear	..
3	14.	762.20	29.938	44.2	41.	.238	(A. 44.2)	82.	SW.	...	..	Clear	..
Means.	...	...	29.893	51.7	...	.226	...	66.5	...	...	..	...	..
4	13.2	762.30	29.941	42.5	40.1	.238	...	86.	SW.	...	..	Clear	..
5	13.	762.20	29.942	41.4	39.7	.243	...	87.	SW.	...	..	Clear	..
6	12.5	762.85	29.971	40.	38.1	.225	...	87.3	SW.	...	..	Clear	..
7	12.2	762.90	29.974	39.3	37.7	.226	5h. 40m.	90.6	SW. by S.	...	..	S.	1
8	11.8	762.95	29.977	38.4	37.2	.226	(D. 36.7)	92.3	SW. by S.	...	..	Cu s., (?)	1
9	11.3	763.25	29.991	38.2	37.3	.230	(A. 38.6)	93.	SW. by S.	...	..	Cl-cu, Cu-s.	2
Means.	...	...	29.966	40.	...	.231	...	99.4	...	...	..	...	...
10	10.7	763.50	30.004	38.	37.	.227	...	93.7	SW. by S.	...	..	S., Cl-s, Cu, N. (?)	3
11	10.6	764.00	30.025	37.	36.	.219	...	93.8	SW. by S.	...	..	Cl., Cl s.	1
12	10.5	764.55	30.047	36.8	35.2	.216	...	92.5	SW. by S.	...	..	Cl.	1
13	10.4	764.55	30.018	42.1	40.	.252	...	...	SW. by S.	...	..	Cl.	4
14	11.	765.20	30.069	46.	42.2	.212	...	79.7	SW. by S.	...	..	Clear	..
15	11.5	765.20	30.068	51.4	45.8	.259	...	74.	SSW.	...	..	Clear	..
Means.	...	...	30.043	41.7	...	.236	...	86.7	...	...	..	...	..
16	12.3	765.00	30.056	55.7	48.5	.273	...	70.3	SW. by S.	...	..	Clear	..
17	13.2	765.00	30.050	59.	51.1	.299	...	68.3	SW. by S.	...	..	Clear	..
18	14.	764.40	30.033	61.3	53.	.321	...	67.2	SSW.	...	..	Clear	..
19	15.	764.30	30.015	62.6	52.	.281	2 1/2 h. 20m.	64.5	SW.	1	..	Clear	..
20	16.	764.10	30.002	64.	52.3	.273	(D. 43.)	62.	SW.	1	..	Clear	..
21	16.7	763.75	29.985	63.7	51.6	.258	(A. 64.)	61.5	SW.	1	..	Clear, hazy	..
Means.	...	...	30.023	61.	...	.284	...	65.3	...	...	..	...	..

[1841.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

April 21, 22.]

h.	Göttingen time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
23	14.	761.75	29.921	48.	46.5	.314	.....	89.	NNW.	..	..	N., raining	8
23	13.5	762.00	29.931	48.6	45.2	.279	.....	81.	NNW.	..	..	N., Ci-cu.	8
0	13.2	762.60	29.956	46.9	43.1	.251	.....	81.	NNW.	..	..	N., Ci-cu.	8
1	13.	763.25	29.983	46.5	42.	.243	.....	81.	NNW.	..	..	N., Ci-cu.	8
2	12.6	763.10	29.980	44.5	41.	.235	.....	81.	NNW.	..	..	Ci., Ci-cu.	3
3	12.	764.00	30.018	43.2	40.	.228	37.3	81.	NNW.	..	..	Ci., Ci-cu.	4
Means	29.965	46.1	....	.258	.....	82.3	.....	..	..	.....	..
4	11.6	764.10	30.023	42.2	39.2	.221	.....	81.8	NNW.	..	..	Dark	4
5	11.3	763.90	30.017	41.6	38.6	.218	.....	82.	NNW.	..	..	Dark	4
6	11.1	763.80	30.014	41.4	38.5	.218	.....	82.	NNW.	..	..	Dark	4
7	10.9	763.90	30.020	41.4	38.6	.220	.....	82.5	NNW.	..	..	Dark	6
8	10.9	763.90	30.019	41.	38.4	.220	.....	83.	NNW.	..	..	Dark	8
9	10.3	763.85	30.020	40.3	38.	.220	.....	85.5	NNW.	..	..	Ci., Ci-cu.	4
Means	30.019	41.3	....	.219	.....	82.8	.....	..	..	.....	..
10	10.	763.65	30.013	40.	37.5	.214	.....	85.	N.	..	..	Ci., Ci-cu.	5
11	9.9	763.50	30.007	39.9	37.6	.217	.....	85.	N. by E.	..	..	Ci., Ci-cu.	3
12	10.2	763.80	30.018	43.5	41.6	.258	.....	82.	NNE.	..	..	Ci., Ci-cu.	2
13	NE.	..	..	.....	..
14	11.	764.00	30.022	46.	42.	.237	.....	79.	NE.	..	..	Ci., Ci-cu.	7
15	10.7	764.25	30.034	45.6	42.1	.244	35.8	79.	ENE.	..	..	Ci., Ci-cu., N.	8
Means	30.019	43.	....	.234	.....	82.	.....	..	..	.....	..
16	10.8	764.15	30.030	46.2	42.2	.239	.....	79.	ENE.	..	..	Cu., Ci-cu., Cu-s	8
17	11.	764.00	30.022	48.6	43.8	.247	.....	72.	ENE.	..	..	Cu., Ci-cu., Cu-s	8
18	11.2	763.15	29.988	49.8	45.1	.262	.....	77.	ENE.	..	..	Cu., Ci-cu., Cu-s	8
19	11.3	763.30	29.993	48.9	44.	.249	.....	76.5	NE.	..	..	Cu., Ci-cu., Cu-s	8
20	11.3	763.15	29.987	48.3	43.6	.246	.....	77.	NE.	..	..	Cu., Ci-cu., Cu-s	8
21	11.3	762.25	29.952	48.1	44.1	.260	39.4	79.	NE.	..	..	Cu., Ci-cu., N.	8
Means	29.995	48.3	....	.250	.....	76.7	.....	..	..	.....	..

Mar 28, 29.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

[1841.]

y.	Göttingen time.	Barometer.			Therm °s, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauss's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
22	25.5	765.50	30.017	72.	77.3	72.	.716	...	79.2	SSW.	...	...	Cu., Ci-cu.	6
23	25.3	764.50	29.974	74.	70.7	70.7	.707	...	86.	SSW.	...	...	N., Ci-cu.	7
28	25.3	764.50	29.974	74.6	70.	70.	.676	...	84.	SSW.	...	...	Cu., Ci-cu., Ci-s., Cu-s.	7
0	25.3	764.95	29.992	70.5	66.5	66.5	.603	...	85.	SW. by S.	...	...	Ci-cu., Ci-s., Ci.	2
1	24.7	764.90	29.993	68.5	65.6	65.6	.598	...	85.5	SW. by S.	...	...	Ci-cu., Ci-s.	1
2	24.2	765.10	30.002	67.1	65.2	65.2	.600	64.	91.	S.	...	...	Ci-cu., Ci-s.	3
Means.	...	...	29.992	72.	...	...	.650	...	85.1	...	...	...	...	...
4	24.	764.35	29.994	66.2	64.5	64.5	.588	...	92.	S. by W.	...	...	Ci-s.	1
5	24.	764.90	29.996	65.5	64.	64.	.580	...	92.5	S. by W.	...	...	Ci-s.	1
6	23.8	764.70	29.998	64.7	63.5	63.5	.575	...	92.4	S. by W.	...	...	Ci-s.	1
7	23.8	764.55	29.982	64.5	63.5	63.5	.577	...	92.5	S. by W.	...	...	Ci-s.	2
8	23.1	764.25	29.975	64.5	63.6	63.6	.580	...	92.5	S. by W.	...	...	N.	8
9	22.9	764.20	29.974	65.	64.	64.	.586	...	92.5	SSW.	...	...	N.	8
Means.	...	...	29.985	65.1	...	...	.581	...	92.4	...	...	...	...	...
10	22.8	764.00	29.966	65.	64.	64.	.585	...	92.5	SSW.	...	...	N.	8
11	22.7	764.60	29.990	65.	64.2	64.2	.592	...	92.5	SSW.	...	...	N.	8
12	22.6	764.45	29.985	65.2	64.5	64.5	.599	...	93.	SSW.	...	...	N.	8
13	22.2	764.90	30.004	66.5	65.5	65.5	.617	...	92.5	SSW.	...	...	N.	8
14	22.	764.50	29.990	69.	66.6	66.6	.624	...	88.5	SSW.	...	...	N., Cu.	8
15	22.7	764.50	29.986	72.6	70.	70.	.698	...	89.5	SSW.	...	...	Ci., Ci-cu.	7
Means.	...	...	29.987	67.2	...	...	.619	...	91.2	...	...	...	...	...
16	23.	764.35	29.979	73.2	69.2	69.2	.633	65.	85.5	SE.	...	...	Ci., Ci-cu., N.	8
17	23.1	763.95	29.963	72.5	68.2	68.2	.638	...	85.1	SW. by S.	...	...	Ci-s., Cu-s.	8
18	23.8	763.50	29.940	73.4	70.5	70.5	.707	...	83.5	S. by W.	...	...	Ci-s., Cu-s.	6
19	23.8	763.80	29.940	73.6	68.5	68.5	.636	...	81.8	SW.	...	...	Ci-s., Cu-s.	6
20	24.5	762.60	29.903	75.1	68.8	68.8	.623	...	79.5	SW.	...	...	Ci., Cu., Ci-s., Cu-s.	7
21	25.3	762.05	29.877	77.5	69.8	69.8	.637	...	76.	SW. by W.	...	...	Ci., Cu., Ci-s., Cu-s.	8
Means.	...	...	29.930	74.2	...	...	.651	...	81.9	...	...	...	...	...

[1841.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

June 23, 24.]

A.	Göttingen time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.				1.	2.	3.
22	28.	759.15	29.750	83.8	77.	.835	.....	83.	SE.	.....	.....	7	Cu, Ci-cu, N., Cu-s.	..	45	..
23	28.4	758.80	29.735	84.9	79.1	.909	.....	81.9	S.	.....	.....	.6	Ci-cu, Cu-s, Cu.	..	45	45
0	28.4	758.95	29.741	83.	78.	.895	.....	84.7	SSW.	.....	.....	.3	Cu, Ci-cu, Cu-s.	90	67	90
1	28.	759.25	29.754	78.	75.	.821	.....	89.2	SW.	.....	.....	.2	Cu-s, Ci-s, Ci.	90	90	90
2	27.3	759.50	29.767	75.	73.	.779	.....	90.3	SW.	.....	.....	.3	Ci, Cu, Ci-s, Cu-s.	90	90	90
3	27.	759.70	29.777	74.5	73.	.785	70.5	91.7	SW.	.....	.....	.3	Cu-s, Ci-s in W.	..	..	..
Means	29.754	79.9	.....	.836	.....	86.8	.....	.....	.....	..	.....	..	..	..
4	26.7	759.60	29.774	73.5	72.	.759	.....	91.7	SW.	.....	.....	.9	Cu-s (?)	..	..	..
5	26.3	759.55	29.775	73.5	72.	.759	.....	92.	SW.	.....	.....	1.0	Cu-s (?)	..	..	..
6	26.2	759.50	29.773	73.2	71.9	.759	.....	92.3	SW.	.....	.....	1.0	Ci-cu, N., rain.	..	..	..
7	26.	759.25	29.764	71.5	70.1	.714	.....	92.	WSW.	.....	.....	.4	Ci-cu, Cu-s.	..	..	..
8	25.9	758.90	29.751	71.5	70.2	.718	.....	92.	WSW.	.....	.....	.6	Foggy, S.	..	..	..
9	25.5	759.30	29.768	69.6	67.8	.657	.....	92.	WSW.	.....	.....	1.0	Ci, Ci-s.	..	..	..
Means	29.767	72.1	.....	.728	.....	92.	.....	.....	.....	..	.....	..	..	..
10	25.1	759.75	29.788	68.8	67.2	.646	.....	92.5	WSW.	.....	.....	1.0	Foggy, S.	..	..	..
11	25.2	759.80	29.790	70.6	70.1	.724	.....	92.3	WSW.	.....	.....	.7	Ci, Ci-cu, foggy.	..	..	..
12	25.2	759.75	29.787	71.5	70.8	.738	.....	92.	SW.	.....	.....	..	.....	..	..	..
13	25.3	760.50	29.817	74.3	72.8	.780	.....	86.7	WNW.	.....	.....	.6	Ci, Ci-cu, Ci-s, Cu.	..	..	..
14	25.9	760.55	29.816	76.8	73.9	.792	.....	88.5	NNW.	.....	.....	.5	Ci-cu, Ci-s, Ci.	..	..	..
15	25.5	760.50	29.812	79.5	74.2	.774	.....	83.	SW.	.....	.....	.7	Cu, Ci-cu, Ci-s.	270	315	..
Means	29.802	73.6	.....	.776	.....	89.2	.....	.....	.....	..	.....	..	..	..
16	27.3	760.70	29.815	82.2	77.	.853	71.2	81.	SW.	.....	.....	.6	Cu, Ci, Ci-cu, Ci-s.	270	337	90
17	28.	761.00	29.823	83.5	77.7	.867	.....	80.	SW.	.....	.....	.6	Cu, Ci, Ci-cu, Ci-s.	0	45	0
18	28.5	760.90	29.817	85.1	78.2	.870	.....	80.3	SW.	.....	.....	.5	Cu, Ci, Ci-cu, Ci-s.	0	0	90
19	29.3	760.75	29.808	85.	77.5	.842	.....	79.	SW.	.....	.....	.5	Ci, Cu, Cu-s.	90	45	90
20	29.8	760.65	29.802	84.9	77.	.823	.....	79.	SW.	.....	.....	.3	Ci, Cu, Cu-s.	45	45	90
21	30.2	760.60	29.797	83.7	74.5	.717	.....	72.5	WSW.	.....	.....	.4	Ci and Ci-cu, Ci-s.	45	90	..
Means	29.810	84.4	.....	.829	.....	78.6	.....	.....	.....	..	.....	..	..	..

h. m.	Observatory time.	Barometer.			Therm's, Foh.		Force of vapor, ins.	Dew point, Foh.	Hygr., Saussure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 10ths.	Direction of the strata of clouds.		
		Température, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.				1.	2.	3.
4	15*	24.2	763.45	30.135	70.	69.	.693	...	92.7	SSW.	...	...	Ci-s, N.	1.0	...	...	...
5	15	24.2	768.60	30.141	70.4	69.5	.705	...	92.6	SW.	...	...	Ci-s, N.	1.0	...	...	...
6	15	24.	768.40	30.133	70.8	69.7	.708	...	92.8	SW.	...	...	N.	1.0	...	...	...
7	15	24.3	768.55	30.138	72.6	71.	.733	...	90.8	SW.	...	...	S, N, Ci-s, Cu-s	1.0	...	...	...
8	15	25.4	768.60	30.134	76.	72.2	.738	...	85.5	WSW.	...	...	Cu, Ci-s, Ci cu.	.8	...	...	...
9	15	26.1	768.60	30.132	78.5	73.7	.765	...	84.	SSW.	...	...	Cu, Ci cu.	.8	...	...	...
Means	...	...	...	30.105	73.	...	.724	...	89.7	...	...	...	...	...	...	...	...
10	15	27.	763.30	30.124	81.	71.7	.774	...	81.	SSW.	...	...	Ci, Cu, Ci-cu, Ci-s.	.6	90	...	90
11	15	27.8	768.10	30.104	82.2	74.8	.766	...	75.5	SSW.	...	...	Cu, Ci-cu, Ci-s.	.4	...	...	...
12	15	28.8	767.50	30.074	83.	73.6	.709	...	74.	SSW.	.6	...	Cu, Ci-cu, Ci-s.	.3	90	...	...
13	15	29.4	767.15	30.058	84.8	74.5	.725	...	71.3	SW.	1.0	...	Ci, Cu, Ci-cu.	.4	...	...	...
14	15	29.8	766.50	30.032	84.3	74.	.714	...	71.5	SW.	.9	...	Cu, Ci-cu.	.5	...	90	...
15	15	30.3	766.00	30.008	86.	74.2	.700	...	69.1	SW.	1.2	...	Cu, Ci-cu.	.33	...	...	...
Means	...	...	...	30.067	83.6	...	.731	...	73.7	...	...	...	...	...	...	...	...

* For the omitted observations, see meteorological term day of July.

August 27, 28.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

[1841.]

[97]

470

h. m.	Observatory time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Sausures's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 10ths.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.				1.	2.	3.
16	15	25.	761.75	29.867	76.	71.6	.716	.....	86.	WNW.	..	..	Cu., Ci-cu, N.....	1.0	..	67	..
17	15	25.2	761.90	29.872	76.3	72.	.728	.....	83.8	N.	..	..	Cu., Ci-cu, N.....	1.0	..	45	..
18	15	25.3	762.05	29.877	76.4	71.8	.729	.....	86.	N.	..	..	Cu., Ci, N.....	1.0	..	67	..
19	15	25.3	762.40	29.891	74.4	72.	.749	.....	89.	N.	..	..	Cu., N.....	1.0	..	..	..
20	15	25.1	763.20	29.922	73.8	71.2	.726	.....	89.	N.	..	..	Cu., N.....	1.0	..	..	..
21	15	25.1	763.00	29.915	73.	71.	.729	.....	90.	NNE.	..	..	Cu., Ci-cu, Ci-s.....	1.0	..	..	..
Means	.....	.....	.....	29.891	74.8	.....	.730	.....	87.1	.....	..	..	.....	.....	..	..	..
22	15	25.1	763.10	29.918	72.5	71.	.734	.....	91.	NE.	..	..	Ci-s, N.....	1.0	..	..	..
23	15	25.3	763.30	29.926	72.	71.	.740	.....	93.	NE.	..	..	Slight rain, Ci-s, N, Cu.	1.0	..	..	..
0	15	25.4	763.50	29.933	71.5	70.2	.717	.....	93.	NNE.	..	..	Slight rain, Ci-s, N, Cu.	1.0	..	..	..
1	15	25.3	763.35	29.928	71.3	70.	.713	.....	92.3	NNE.	..	..	Ci-s, Cu-s, N.....	1.0	..	..	..
2	15	25.2	763.15	29.920	71.	69.7	.705	.....	92.	NNE.	..	..	Ci-cu, Cu-s, (?) N.....	1.0	..	..	..
3	15	25.1	763.00	29.915	71.2	70.	.714	.....	92.	NE.	..	..	Ci-cu, N.....	1.0	..	..	..
Means	.....	.....	.....	29.923	71.6	.....	.721	.....	92.2	.....	..	..	.....	.....	..	..	..
4	15	25.	762.85	29.910	70.8	70.	.718	.....	93.	NE.	..	..	Cu-s, (?) Ci-s.....	1.0	..	..	..
5	15	25.1	763.35	29.929	71.1	70.6	.736	.....	92.	NE.	..	..	Ci-s, hazy.....	1.0	..	..	..
6	15	25.	763.80	29.947	71.5	71.	.745	.....	92.5	ESE.	..	..	S, Ci-s.....	1.0	..	..	..
7	15	25.	763.80	29.947	72.	71.2	.747	.....	92.7	E	..	..	S, Ci-s.....	1.0	..	..	..
8	15	25.	764.00	29.955	73.	71.7	.753	.....	92.	ESE.	..	..	S, Ci-s, N (?).....	1.0	270	..	..
9	15	25.	764.10	29.959	74.5	72.5	.766	.....	90.6	ENE.	..	..	Ci-s, N.....	1.0	270	..	..
Means	.....	.....	.....	29.941	72.2	.....	.744	.....	92.1	.....	..	..	.....	.....	..	..	..
10	15	25.	764.20	29.963	74.7	73.2	.789	.....	91.	ESE.	..	.03	Ci-s, S, N, rain.....	1.0	270	..	..
11	15	25.2	764.20	29.962	75.6	74.	.811	.....	91.3	SE.	..	.02	Ci-s, S, N, fir rain.	1.0	270	..	..
12	15	25.5	764.15	29.958	77.	73.9	.789	.....	90.4	E.	..	.02	Ci-s, S, N, showers.	.95	270	..	..
13	15	25.9	763.80	29.943	79.	75.5	.829	.....	87.3	SSE.	..	..	Ci, Cu, Ci-cu, N.....	.8	315	..	90
14	15	26.	763.70	29.938	75.5	74.	.810	.....	90.3	ESE.	.3	.03	N, rain.....	1.0	337	..	..
15	15	26.	763.80	29.943	75.3	74.	.813	.....	91.2	ESE.	..	.25	N, rain.....	1.0	315	..	..
Means	.....	.....	.....	29.951	76.2	.....	.807	.....	90.3	.....	..	..	.....	.....	..	..	..

h. m.	Observatory time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Gaussur's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 10ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
16	15	20.4	759.00	29.781	65.5	61.	.490	...	82.5	ENE.	..	..	Cu., Ci-a, S.	1.0
17	15	20.5	759.00	29.779	64.5	61.	.502	...	85.	ENE.	..	..	Cu., Ci-a, S.	1.0
18	15	20.6	758.90	29.772	63.6	60.	.482	...	86.	ENE.	..	..	Cu., Ci-a, S.	1.0
19	15	21.	759.00	29.777	63.	60.5	.505	...	88.	ENE.	..	..	Ci-a, ?	1.0
20	15	21.	759.30	29.789	62.8	59.8	.486	...	87.	ESE.	..	..	Ci-a, ?	1.0
21	15	20.8	759.50	29.798	61.5	59.5	.493	...	86.3	S.	..	..	Ci-a, ?	.8
Means	...	...	...	29.793	63.5	...	.493	...	86.1	...	..	..	...	...
22	15	20.7	759.10	29.783	60.3	58.5	.478	...	90.5	SE.	..	..	Ci-a, ?	.5
23	15	20.6	759.10	29.783	59.4	58.	.473	...	91.5	ESE.	..	..	?	.6
0	15	20.3	758.95	29.780	60.	58.5	.481	...	87.	ESE.	..	..	N. ?	1.0
1	15	20.2	758.90	29.778	60.3	58.3	.472	...	89.	ESE.	..	..	Cu., S.	1.0
2	15	20.	758.55	29.765	59.5	57.7	.465	...	89.	ENE.	..	..	Overcast.	1.0
3	15	20.	758.40	29.759	59.5	56.1	.475	...	89.	SE.	..	..	Cu.	1.0
Means	...	...	...	29.775	59.8	...	.474	...	89.3	...	..	..	...	...
4	15	19.8	758.35	29.759	60.2	58.2	.470	...	88.	ESE.	..	..	Cu., S.	1.0
5	15	19.7	758.55	29.767	60.5	58.5	.476	...	89.5	ESE.	..	..	Cu., S.	1.0
6	15	19.7	758.70	29.773	59.5	57.5	.458	...	91.5	ENE.	..	..	Cu., S., Ci-a.	.9
7	15	19.2	758.65	29.773	62.2	59.5	.485	...	88.7	E.	..	..	Ci., Cu., Ci cu., S.	.8
8	15	19.8	758.65	29.771	65.2	62.	.523	...	87.	E.	..	..	Ci., Cu., Ci cu., S.	.4
9	15	20.2	758.70	29.770	68.	64.	.553	...	85.5	ESE.	.1	..	Ci., Cu., Ci-cu. Ci-a, S.	.6
Means	...	...	...	29.769	62.6	...	.494	...	86.4	...	..	..	...	...
10	15	20.6	758.50	29.760	68.1	64.5	.566	...	87.	ESE.	.1	..	Cu., Ci-cu., Ci-a., showery, S.	1.0
11	15	20.8	758.50	29.759	68.	65.7	.607	...	89.	ESE.	.1	.02	Cu., Ci-a., S., N., showery.	1.0
12	15	21.	758.05	29.740	69.5	68.5	.614	...	84.5	ESE.	..	.01	Cu., Ci-a., showery, SE.	1.0
13	15	21.1	757.75	29.729	69.7	66.3	.607	...	87.5	ESE.	.2	..	Cu., Ci-a., N., SE.	1.0
14	15	21.2	757.65	29.725	69.3	66.3	.610	...	88.	SE.	.2	..	Cu., Ci-a., N., SE.	1.0
15	15	21.2	757.85	29.733	67.8	65.5	.603	...	88.	ESE.	.2	..	Cu., Ci-a., N., SE.	1.0
Means	...	...	...	29.741	68.7	...	.601	...	86.	...	..	..	...	...

October 20, 21.]

METEOROLOGICAL OBSERVATIONS ON THE MAGNETIC TERM DAY.

[1841.]

y. m.	Observatory time.	Barometer.			Therm'rs, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Sausure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 10ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
16	16	14.3	748.60	29.401	...	...	...	...	80.	...	1.3	...	Cu., Ci-cu from SW.	...
17	15	14.3	748.60	29.401	...	...	...	...	...	...	...	...	...	...
18	15	14.3	749.00	29.416	48.6	45.	.274	...	77.	W.	...	...	Clear	...
19	15	14.3	749.10	29.421	47.7	43.3	.249	...	77.	WNW.	.3	...	Clear	...
20	15	14.	749.00	29.419	45.4	41.9	.243	...	78.3	W.	...	...	Clear	...
21	15	13.8	749.00	29.414	47.2	...	.255	...	86.	...	...	...	...	...
Means.	...	...	...	...	...	...	...	...	86.5	SW.	...	...	...	...
22	15	13.3	748.85	29.415	42.8	40.8	.250	...	87.5	SW.	...	...	Clear	...
23	15	13.	748.35	29.398	41.5	39.9	.245	...	89.	WSW.	...	...	Cu., S.	...
0	15	12.8	747.90	29.382	42.5	40.6	.249	...	89.	SSW.	.2	...	Cu., S.?	.5
1	15	12.2	747.90	29.385	40.8	39.5	.246	...	85.	WSW.	...	...	Overcast.	1.0
2	15	11.8	747.60	29.374	43.5	41.2	.251	...	87.	WSW.	...	...	Overcast.	1.0
3	15	11.8	747.35	29.365	43.3	41.2	.253	...	86.9	...	...	...	...	...
Means.	...	...	...	...	42.4	...	.249	...	87.	SW.	...	...	Overcast.	...
4	15	12.5	747.50	29.368	44.2	41.9	.257	...	88.3	SW.	...	...	S, Ci-cu.	1.0
5	15	12.7	747.70	29.374	44.3	42.3	.261	...	83.5	SW.	...	...	S, Cu.	.9
6	15	12.7	747.90	29.382	44.8	42.3	.259	...	83.5	WNW.	...	...	S, Cu.	.9
7	15	12.3	747.90	29.385	46.5	43.4	.264	...	82.5	WNW.	...	...	Ci cu., Cu., WNW.	.3
8	15	12.5	748.30	29.399	48.2	45.	.279	...	76.	WNW.	...	...	Cu., NW	.7
9	15	13.2	748.40	29.398	49.4	44.	.240	...	83.6	...	...	...	...	...
Means.	...	...	...	...	46.4	...	.260	...	69.3	WNW.	...	...	Cu., NW	.8
10	15	13.7	748.35	29.393	50.6	43.1	.211	...	66.5	W.	...	...	Cu., NW	.5
11	15	13.9	748.50	29.400	50.7	42.5	.198	...	63.	WNW.	...	...	Cu., NW	.8
12	15	14.	748.35	29.393	51.6	42.6	.190	...	65.	WNW.	...	...	Cu., NNW	1.0
13	15	14.1	748.25	29.389	51.7	44.5	.230	...	66.	WNW.	...	...	Cu., NNW	.6
14	15	14.5	748.10	29.381	52.5	46.	.251	...	65.5	WNW.	2.2	...	Cu., NW	.9
15	15	15.	748.35	29.349	51.8	43.8	.214	...	65.8	...	...	...	...	...
Means.	...	...	...	...	51.6	...	.217	...	...	...	...	...	...	...

h. m.	Observatory time.	Barometer.		Therm's, Fah.		Force of vapor, in.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 10ths.
		Temp. in shade.	Obs'd height in millimetres.	Corr. height in inches.	Dry.	Wet.			Dir. points.	Force, lbs.			
16	15	10.	751.40	29.532	46.8	46.2	.321	92.	NE.	..	..	N, S.	1.0
17	15	10.2	752.10	29.559	46.3	45.8	.318	92.	NE.	..	..	N, slight rain, S.	1.0
18	15	10.6	752.50	29.574	46.	45.5	.314	92.	SE.	..	..	N, rain, S.	1.0
19	15	10.9	753.00	29.592	45.7	45.2	.311	92.	S.	..	.02	N, slight rain, S.	1.0
20	15	11.	753.55	29.612	46.	45.5	.314	92.	WSW.	..	.04	N, slight rain, S.	1.0
21	15	11.2	754.40	29.646	46.5	45.1	.300	90.	NW.	..	.01	N, Ci-a.	1.0
Means.		.....	.....	29.586	46.2	.....	.313	91.7	.....	.....	..	.....	.....
22	15	11.2	755.65	29.695	41.5	39.8	.244	87.	NW.	.2	..	N, S, Ci-a.	1.0
23	15	11.9	756.30	29.716	39.2	37.	.213	84.5	NNW.	.8	..	S, Ci-a.	1.0
0	15	11.6	756.65	29.730	35.7	33.	.176	80.9	NNW.	1.0	..	N, Ci-a.	1.0
1	15	11.	757.45	29.765	34.2	30.3	.149	78.	NW.	1.5	..	Ci-a.	1.0
2	15	10.5	758.75	29.819	32.7	30.1	.160	82.2	WNW.	.8	..	Ci-cu, Ci-a.	.4
3	15	10.	759.40	29.846	32.6	30.6	.170	77.5	WNW.	..	..	Ci-cu, Ci-a.	1.0
Means.		.....	.....	29.762	36.	.....	.185	81.7	.....	.....	..	.....	.....
4	15	9.7	759.70	29.860	32.2	29.3	.162	76.5	WNW.	.6	..	Ci-cu, S.	1.0
5	15	9.3	760.90	29.909	31.6	28.4	.143	75.	WNW.	.8	..	Cu, Ci-cu, S.	1.0
6	15	9.1	761.10	29.917	31.5	28.3	.143	75.	W.	1.0	..	Cu, Ci-cu, S.	1.0
7	15	8.3	761.75	29.947	31.4	28.3	.144	74.6	W.	.6	..	Cu, Ci-cu, S.	1.0
8	15	7.5	762.60	29.985	30.5	26.9	.129	70.	WNW.	1.7	..	Cu.	.9
9	15	7.	763.00	30.003	31.	26.5	.118	68.	W.	2.2	..	Cu, Ci. (Clouds moving WNW.)	.6
Means.		.....	.....	29.937	31.4	.....	.138	73.	.....	.....	..	.....	.....
10	15	7.3	763.30	30.013	31.5	26.8	.117	66.5	W.	2.5	..	Ci, Cu, WNW.	.7
11	15	7.7	764.35	30.052	30.2	26.	.118	68.	WNW.	2.4	..	Cu, WNW.	.9
12	15	7.8	764.30	30.050	30.	25.5	.113	67.5	WNW.	2.0	..	Cu, WNW.	.3
13	15	8.	764.70	30.065	30.3	26.	.117	66.5	N.	2.3	..	Cu, N.	.3
14	15	8.	765.35	30.090	28.8	26.	.116	66.3	NNW.	2.4	..	Cu, N.	.4
15	15	7.1	765.65	30.106	30.	27.	.137	65.5	NNW.	2.4	..	Small detached Cu.	.1
Means.		.....	.....	30.063	30.1	.....	.119	66.7	.....	.....	..	.....	.....

Observatory time	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.	Force of vapor, i	Dew point, Fah	Hygr., Gaussen	Dir. points.	Force, lbs.	Rain, inches.	Clouds, &c.	Sky covered, 10
16 15.....	18.3	780.55	30.637	20.5	17.9	.093	.....	68.	ENE.	..	..	Cl, Ci-cu.....	.2
17 15.....	18.	780.34	30.631	19.4	17.3	.096	.....	69.9	ENE.	..	..	Cl, Ci-s.....	.2
18 15.....	17.	780.65	30.649	19.4	17.	.091	.....	69.9	E.	.6	..	Cl, Ci-s.....	.3
19 15.....	16.	781.10	30.670	18.5	16.5	.094	.....	69.	ENE.	..	..	Cl.....	.1
20 15.....	15.6	780.85	30.663	17.	15.	.087	.....	69.5	ENE.	..	..	Cl, Cu, Ci-cu.....	.9
21 15.....	15.2	780.75	30.661	17.5	16.	.097	.....	70.3	ENE.	..	..	Cl, Cu, Ci-cu, N. ?.....	1.0
Means.....	....	.....	30.652	18.7	....	.093	.....	69.4	....	..	..	.....	..
22 15.....	15.6	780.75	30.660	17.5	16.2	.099	.....	72.1	NNE.	..	..	Cl, Ci-s.....	1.0
23 15.....	14.5	780.40	30.650	17.5	16.2	.099	.....	74.1	ENE.	..	..	N, hailing.....	1.0
0 15.....	13.6	779.25	30.610	17.6	16.4	.101	.....	76.9	NE.	.1	..	Cl-s, Ci-cu.....	1.0
1 15.....	13.9	778.60	30.583	17.9	16.9	.105	.....	78.	ENE.	..	..	S, Ci-s.....	1.0
2 15.....	13.7	779.00	30.599	18.	17.	.106	.....	78.9	ENE.	..	..	Cl-cu, Ci-s.....	1.0
3 15.....	11.6	777.35	30.544	18.5	17.6	.109	.....	81.	ENE.	.2	..	N ?.....	1.0
Means.....	....	.....	30.608	17.8	....	.103	.....	76.8	....	..	..	.....	..
4 15.....	11.	776.60	30.518	18.8	18.3	.116	.....	83.	E.	.2	..	Cl-cu. ?.....	1.0
5 15.....	11.7	776.25	30.501	20.7	20.	.123	.....	84.5	ENE.	1.5	..	N ?.....	1.0
6 15.....	12.8	776.30	30.498	21.6	20.9	.127	.....	86.	E.	1.3	..	N.....	1.0
7 15.....	13.7	775.90	30.479	23.	22.3	.134	.....	87.	E.	1.7	..	Cl-cu.....	1.0
8 15.....	13.7	775.75	30.473	23.8	23.2	.139	.....	88.5	ENE.	.2	..	Cl-cu, Ci-s.....	1.0
9 15.....	15.1	775.20	30.444	26.3	25.5	.150	.....	89.	ENE.	.2	..	N ? Ci-s.....	1.0
Means.....	....	.....	30.485	22.4	....	.131	.....	86.3	....	..	..	.....	..
10 15.....	16.3	774.45	30.407	28.	27.1	.158	.....	89.5	ENE.	.2	..	N, Ci-s.....	1.0
11 15.....	16.8	773.80	30.381	30.5	29.6	.174	.....	89.5	ENE.	.1	..	N, slight rain, Ci-s.....	1.0
12 15.....	17.7	772.50	30.323	34.	32.7	.189	.....	93.	E.	..	.03	N, S, Ci-s, rain.....	1.0
13 15.....	18.5	770.80	30.252	37.3	36.5	.236	.....	92.5	ESE.	..	.05	N, S, rain.....	1.0
14 15.....	19.2	770.10	30.222	38.	37.0	.227	.....	92.	ENE.	..	.04	N, S, rain.....	1.0
15 15.....	19.5	769.55	30.199	39.	38.0	.236	.....	92.	ESE.	.2	.09	N, S, rain.....	1.0
Means.....	....	.....	30.397	34.5	....	.203	.....	91.4	....	..	..	.....	..

JANUARY 31, 22.]

METEOROLOGICAL TERM DAY.

[1841.]

h. m.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6 25.....	1.8	758.95	29.869	32.6	32.4	.200	.....	92.7	ENE.	.1	.30	N., raining hard.	8
7 25.....	.....	.....	.....	.....	.....	.....	.....	.....	ENE.	.....	.05	.....	.....
8 25.....	2.	757.50	29.811	33.2	33.	.205	.....	92.	ENE.	.....	.08	N., raining hard.	8
9 25.....	2.	757.40	29.807	33.4	33.2	.206	.....	95.	NNE.	.....	.25	N., raining hard.	8
10 25.....	2.3	757.00	29.790	33.7	33.5	.208	.....	95.	NNE.	.....	.67	N., raining hard.	8
11 25.....	2.4	756.60	29.773	34.	33.7	.209	.....	94.5	NNE.	.....	.13	N., raining hard.	8
Means.....	.....	.....	29.810	33.4	.....	.206	.....	93.8	.....	.....	.....	.....	.....
12 35.....	2.7	754.75	29.700	35.1	34.6	.213	.....	93.5	NNE.	.....	.10	N., raining.	8
13 25.....	3.	754.30	29.681	34.7	34.5	.216	.....	93.5	NW.	.....	.04	N., raining.	8
14 25.....	3.	754.30	29.681	34.6	34.3	.213	.....	93.5	NW.	.....	.01	N., raining.	8
15 25.....	3.4	754.50	29.687	34.6	34.3	.213	.....	94.	NW.	.....	.03	N.	8
16 25.....	3.2	751.70	29.695	35.1	34.8	.217	.....	93.5	NW.	.....	.03	N., raining.	8
17 25.....	2.9	754.60	29.694	35.5	35.	.216	.....	93.3	NW.	.....	.02	N., raining.	8
Means.....	.....	.....	29.690	34.9	.....	.215	.....	93.5	.....	.....	.....	.....	.....
18 25.....	3.	754.70	29.697	35.4	34.9	.215	.....	93.2	WNW.	.....	.01	N., raining.	8
19 35.....	3.	754.80	29.701	35.8	35.1	.214	.....	92.	NW.	.....	.03	N., raining.	8
20 25.....	3.	755.00	29.708	36.	35.3	.216	.....	92.	NW.	.....	.03	N., raining.	8
21 25.....	3.	755.60	29.732	34.5	33.8	.204	.....	91.5	NW.	.....	.04	N., raining.	8
22 25.....	3.	755.85	29.741	33.8	33.3	.203	.....	92.	NNW.	.....	.03	N., raining.	8
23 25.....	3.	756.00	29.746	34.	33.5	.204	.....	91.	NNW.	.....	.04	N., raining.	8
Means.....	.....	.....	29.721	34.9	.....	.209	.....	91.9	.....	.....	.....	.....	.....
0 25.....	3.	756.10	29.750	34.6	33.7	.202	.....	90.5	NNW.	.....	.....	N.	8
1 25.....	3.	756.25	29.756	35.6	33.4	.185	.....	84.5	NW.	.....	.....	Clear Exc. in Hor. S.	.....
2 25.....	.....	.....	.....	.....	.....	.....	.....	.....	NNW.	.....	.....	.....	.....
3 25.....	NNW.
4 25.....	NNW.
5 25.....	NNW.
Means.....2

FEBRUARY 23, 23.]

METEOROLOGICAL TERM DAY.

[1841.]

[97]

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h. m.	Barometer.		Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygt., Barometre's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, eiths.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.			Dir. points.	Force, lbs.			
6 25	5.2	750.05	29.502	33.6	30.5	153		NNE.			Slight haze.	8
7 25	5.	751.15	29.546	34.	31.	162		NNE.			Cl., Cu-s.	8
8 25	5.	751.60	29.564	34.7	31.6	163		ENE.			Cl., Ci-cn., Ci-s	8
9 25	5.3	751.85	29.573	35.7	32.9	175		NE.			Cl., Ci-cn., Ci-s	8
10 25	6.	751.50	29.555	37.5	34.5	184		ENE.			Cl., Ci-s.	6
11 45	6.7	751.45	29.550	41.5	38.2	211		ENE.			Light Cl. (This observation 20m. late.)	7
Means.			29.548	36.2		176						
12 25	7.3	751.25	29.539	41.6	38.	206		NE.			Light Cl.	6
13 25	8.4	750.70	29.513	43.6	39.2	208		N.			S.	4
14 25	8.9	750.40	29.498	45.1	40.6	220		NW.			S., hazy	2
15 25	9.8	750.25	29.489	45.3	39.8	201		NW.			Hazy.	
16 25	10.2	750.55	29.498	44.8	39.4	199		NNW.			Hazy.	
17 25	10.4	750.30	29.484	42.6	38.4	203		N.			Hazy.	
Means.			29.503	43.8		206						
18 25	10.9	750.45	29.492	38.5	35.5	192		N. by E.			Hazy.	
19 25	9.5	750.00	29.480	36.	34.	192		NE. by E.			Hazy.	
20 25	8.3	749.85	29.479	34.	32.5	186		NE. by E.			Hazy.	
21 25	7.3	749.15	29.456	31.6	30.7	181		NE. by E.			Clear.	
22 25	7.	748.75	29.443	31.	30.	176		S.			Clear.	
23 25	7.3	748.00	29.411	30.5	29.5	172		SSW.			Clear.	
Means.			29.460	33.6		183						
0 25	7.5	747.65	29.397	33.	30.5	164		SW. by S.			Clear.	
1 25	6.3	747.25	29.386	30.9	29.4	167		SW. by S.			Clear.	
2 25	5.9	746.95	29.377	31.1	29.7	170		SW. by S.			Clear.	
3 25	5.4	746.30	29.353	31.1	29.6	168		SW.			Clear.	
4 25	5.2	745.45	29.321	32.	30.5	174		SW.			Clear.	
5 25	4.8	745.10	29.310	31.5	30.	171		SW. by S.			Clear.	
Means.			29.357	31.6		169						

MARCH 22, 23.]

METEOROLOGICAL TERM DAY.

[1841.]

Observatory time.		Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
h.	m.													
6	15	7.2	769.70	30.265	32.5	29.9	.159	.....	83.3	E. by N.	..	..	Ci., S., Ci.-s.	7
7	15	6.2	770.15	30.287	33.5	30.5	.159	94.	82.8	ENE.	..	..	Ci., S., Ci.-s., Ci.-cu.	7
8	15	7.	770.10	30.282	35.8	32.2	.160	(D. 25.2)	81.	ENE.	..	..	Ci., S., Ci.-s., Ci.-cu.	1
9	15	7.5	770.00	30.275	38.	34.	.168	(A. 38.)	79.3	E. by N.	..	..	Ci., S., Ci.-s., Ci.-cu.	7
10	15	8.	769.90	30.268	41.6	36.9	.183	.....	78.2	E.	..	..	Ci., S., Ci.-s., Ci.-cu.	3
11	15	8.7	769.60	30.254	46.3	39.5	.183	.....	74.	ESE.	..	..	Light Ci. and S.	4
Means.		.....	.....	30.272	37.9	.....	.169	.....	79.8	.....	..	..	.....	..
12	15	9.5	769.00	30.226	49.	41.7	.198	.....	72.	ESE.	1	..	Light Ci. and S.	4
13	15	10.	768.00	30.185	50.	43.	.213	154.	71.	ESE.	1	..	Light Ci. and S.	6
14	15	10.2	767.60	30.168	49.5	42.1	.200	(D. 28.8)	71.	SE.	1	..	Light Ci. and S.	7
15	15	10.2	766.80	30.137	47.1	41.1	.207	(A. 47.7)	73.5	SE.	1	..	Light Ci. and S.	8
16	15	10.2	767.00	30.144	44.5	39.1	.194	.....	75.4	SE.	1	..	Light Ci. and S.	8
17	15	9.6	767.00	30.147	42.4	38.3	.202	.....	79.3	SE.	..	..	Light Ci. and S.	8
Means.		.....	.....	30.168	47.1	.....	.202	.....	73.7	.....	..	..	.....	..
18	15	10.	766.75	30.136	39.8	36.6	.199	.....	81.	SE.	..	..	Ci., S.	8
19	15	9.6	766.50	30.128	38.	35.7	.201	214.	86.3	SE.	..	..	Ci., S.	8
20	15	9.3	766.10	30.113	38.	36.	.207	(D. 32.3)	89.	ENE.	..	..	Cu., Ci.-cu.	8
21	15	8.1	764.90	30.073	38.2	36.5	.215	(A. 38.2)	90.2	E. by S.	..	..	Cu., Ci.-cu.	8
22	15	8.5	764.35	30.048	39.	37.1	.217	.....	91.3	E.	..	..	Cu., Ci.-cu., ? very dark	8
23	15	8.4	763.45	30.013	39.4	37.9	.229	.....	91.	ENE.	..	..	Cu., Ci.-cu.	8
Means.		.....	.....	30.085	38.7	.....	.211	.....	88.1	.....	..	..	.....	..
0	15	8.3	762.80	29.988	40.6	39.	.237	.....	90.2	ENE.	..	..	Cu., Ci.-cu., N.	8
1	15	8.2	761.60	29.941	41.6	40.2	.250	34.	90.5	E.	..	..	Ci.-cu.	8
2	15	8.2	760.65	29.904	42.	41.	.263	(D. 40.2)	91.4	E.	..	..	Ci.-cu.	8
3	15	8.2	759.55	29.860	45.5	43.7	.281	(A. 43.7)	88.	SE.	..	..	Ci.-cu.	8
4	15	8.3	758.90	29.835	46.3	44.6	.291	.....	89.	E. by S.	..	..	Ci.-cu., ? very dark	8
5	15	8.4	757.95	29.798	49.4	48.	.333	.....	90.3	SSE.	..	..	Ci.-cu.	8
Means.		.....	.....	29.888	44.3	.....	.276	.....	89.9	.....	..	..	.....	..

y. m.	Observatory time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Beaumore's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths
		Temp'ture, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6	15	11.1	758.85	29.820	48.5	48.1	.346	.....	92.	NE. by N.	..	..	N.....	8
7	15	11.7	758.75	29.813	49.4	48.6	.351	.....	92.	NE.	..	..	N, S.....	8
8	15	11.7	758.90	29.819	50.7	49.6	.356	.....	90.	NNE.	..	..	N, S.....	8
9	15	12.	759.00	29.821	51.6	50.	.365	48.5	89.5	NE.	..	..	N, Cu-s.....	8
10	15	12.4	759.60	29.843	54.	51.6	.367	.....	87.2	NE.	..	..	N, Ci-cu., Cu-s.....	8
11	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	..	.....	8
12	15	.....	.....	.....	.....	.....	.....	.....	90.1	.....	..	..	.....	8
13	15	14.	760.00	29.852	53.6	50.3	.340	.....	83.	N.	..	..	N, Ci-cu., Cu-s.....	8
14	15	14.	760.10	29.855	53.8	50.2	.336	.....	82.	N. by W.	..	..	N, Ci-cu., Cu-s.....	8
15	15	14.	760.20	29.860	54.5	50.3	.330	.....	80.5	N.	..	..	N, Ci-cu., Cu-s.....	8
16	15	14.3	761.00	29.888	49.8	48.1	.331	.....	88.5	N.	..	..	N, raining.....	8
17	15	14.	761.75	29.921	48.	46.5	.314	.....	89.	NNW.	..	..	N, raining.....	8
18	15	13.5	762.00	29.931	48.6	45.2	.279	.....	81.	NNW.	..	.06	N, Ci-cu.....	8
Means.	.....	.....	.....	29.884	51.4	.....	.392	.....	84.	.....	..	..	.....	..
18	15	13.2	762.80	29.956	46.9	43.1	.251	.....	81.	NNW.	..	..	N, Ci cu.....	8
19	15	13.	763.25	29.983	45.5	42.	.243	.....	81.	NNW.	..	..	N, Ci cu.....	8
20	15	12.6	763.10	29.980	44.5	41.	.235	.....	81.	NNW.	..	..	Cl., Ci-cu.....	3
21	15	12.	764.00	30.018	43.2	40.	.228	37.3	81.	NNW.	..	..	Cl., Ci-cu. ?.....	4
22	15	11.6	764.10	30.023	42.2	39.2	.221	.....	81.8	NNW.	..	..	Overcast.....	4
23	15	11.3	763.90	30.017	41.6	38.6	.218	.....	82.	NNW.	..	..	Overcast.....	4
Means.	.....	.....	.....	29.996	44.	.....	.233	.....	81.3	.....	..	..	.....	..
0	15	11.1	763.90	30.014	41.4	38.6	.218	.....	83.	NNW.	..	..	Dark.....	4
1	15	10.9	763.90	30.020	41.4	38.6	.220	.....	83.5	NNW.	..	..	Dark.....	6
2	15	10.9	763.90	30.019	41.	38.4	.220	.....	83.	NNW.	..	..	Dark.....	8
3	15	10.3	763.85	30.020	40.3	38.	.230	.....	85.5	NNW.	..	..	Cl., Ci cu.....	4
4	15	10.	763.65	30.013	40.	37.5	.214	.....	85.	N.	..	..	Cl., Ci-cu.....	5
5	15	9.9	763.50	30.007	39.9	37.6	.217	.....	85.	N. by E.	..	..	Cl., Ci-cu.....	8
Means.	.....	.....	.....	30.015	40.7	.....	.218	.....	83.8	.....	..	..	.....	..

MAY 21, 22.]

METEOROLOGICAL TERM DAY.

[1841.]

y m.	Observatory time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saunure's	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 8ths.
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.				Dir. points.	Force, lbs.			
6	15	15.2	764.35	30.016	53.8	52.2	.384	...	89.2	SW. by S.	..	..	Light Ci.	1
7	15	15.9	764.65	30.025	56.6	54.2	.404	...	88.	SW. by W.	..	..	Light Ci.	1
8	15	16.5	764.65	30.023	59.5	56.	.419	...	85.	SW.	..	..	Clear.	..
9	15	17.	764.60	30.018	62.	56.8	.412	49.2	81.	SW.	..	..	Clear.	..
10	15	17.5	764.60	30.015	65.	59.5	.453	...	79.	SW.	..	..	Clear.	..
11	15	18.7	764.30	29.998	69.4	62.7	.497	...	77.	SW.	..	..	Clear.	..
Means.	...	...	...	30.016	61.	...	.428	...	83.2	...	..	..	...	..
12	15	19.8	763.85	29.975	72.2	64.2	.511	...	74.3	SSW.	..	..	Clear.	..
13	15	19.8	763.50	29.961	73.2	62.5	.448	...	69.	WSW.	..	..	Clear.	..
14	15	20.3	763.20	29.946	74.6	64.	.478	...	68.8	SW.	..	..	Clear.	..
15	15	20.9	763.00	29.935	75.5	64.3	.479	54.2	68.2	SW.	..	..	Ci., Ci-cu., S.	1
16	15	21.8	763.00	29.931	76.9	65.4	.496	...	67.3	SW.	..	..	Very light Ci.	1
17	15	22.	762.80	29.923	76.5	65.4	.502	...	66.	SW.	..	..	Very light Ci.	1
Means.	...	...	...	29.945	74.8	...	.586	...	69.3	...	..	..	...	..
18	15	22.3	762.80	29.921	74.5	65.	.511	...	70.5	SW.	..	..	Light Ci.	3
19	15	22.5	763.10	29.931	70.	63.4	.512	...	76.8	SW.	..	..	Ci., Ci-s.	..
20	15	22.3	763.40	29.944	66.7	61.5	.492	...	81.5	SSW.	..	..	Ci., Ci-s.	..
21	15	21.9	764.00	29.970	64.	60.5	.488	57.5	86.	SSW.	..	..	Some clouds in N. Hor.	..
22	15	21.7	764.35	29.981	63.	60.	.489	...	88.2	SSW.	..	..	Some clouds in N. Hor.	2
23	15	21.3	764.35	29.983	62.6	60.	.494	...	89.	SW.	..	..	Some clouds in N. Hor.	1
Means.	...	...	...	29.955	66.8	...	.498	...	82.	...	..	..	...	..
0	15	21.	764.10	29.979	61.	59.	.484	...	90.7	SW.	..	..	Clouds in Hor.?	1
1	15	20.6	763.85	29.970	59.	58.5	.492	...	91.2	SW.	..	..	Clouds in Hor.?	1
2	15	20.3	763.65	29.964	57.5	57.	.467	...	95.	SW.	..	..	Clouds in Hor.?	1
3	15	20.	763.55	29.961	56.6	56.	.451	55.1	93.2	SW.	..	..	Clouds in Hor.?	2
4	15	19.7	763.65	29.967	57.	56.5	.459	...	93.2	SE.	..	..	Ci., Ci-s., Cu., foggy	3
5	15	19.3	763.00	29.979	57.	56.5	.459	...	94.	ESE.	..	..	Ci-cu., S., slight fog.	7
Means.	...	...	...	29.970	58.	...	.469	...	92.9	...	..	..	...	..

[1841.

METEOROLOGICAL TERM DAY.

JUNE 21, 22.]

h. m.	Observatory time.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., %	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, &c.	Direction of the strata of clouds.		
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.				1.	2.	3.
6 15	21.3	765.85	30.046	63.2	61.6	.534	.....	90.5	E.	..	..	1.0	Ci-s., N.	..	45	..
7 15	21.1	766.15	30.059	62.7	61.	.522	.....	90.4	E.	..	..	.8	S., Ci-s., Cu.	..	90	45
8 15	21.	766.60	30.078	62.5	61.	.524	.....	90.6	E.	..	..	1.0	Ci-s.	270	..	..
9 15	20.8	766.90	30.090	63.	60.8	.512	9h.	89.	E.	..	..	1.0	Ci-s., Ci-cu.	270	..	..
10 15	20.9	767.10	30.097	64.5	61.7	.523	(D. 59.6)	86.3	E.	..	..	1.0	Ci-s., Ci-cu.	315	..	..
11 15	21.1	767.30	30.104	66.7	62.8	.530	(A. 63.)	84.	E.	..	..	1.0	Cu., Ci-s., Ci-cu.	315	..	..
Means	30.079	63.8	.....	.524	.....	88.4	.....	..	..	..	.....	..	..	..
12 15	21.5	767.15	30.097	68.6	64.2	.552	.....	81.5	ESE.	..	..	1.0	Cu., Ci-cu.	315	..	..
13 15	21.8	767.35	30.102	69.6	65.3	.575	.....	81.8	SSE.	..	..	1.0	Cu., Ci-cu.	315	..	..
14 15	22.	767.15	30.094	70.5	65.4	.568	.....	80.	SE.	..	..	1.0	Cu., Ci-cu.	337	..	..
15 15	22.3	767.00	30.085	71.7	66.2	.580	15h.	79.4	SE.	..	..	1.0	Cu., Ci-cu.	337	..	..
16 15	22.5	767.15	30.091	70.	64.5	.545	(D. 61.)	80.1	SE.	..	..	1.0	Cu., Ci-cu.	337	..	..
17 15	22.2	767.00	30.085	68.4	63.4	.530	(A. 71.7)	81.	S.	..	..	1.0	Cu., Ci-cu., Ci-s.	315	..	..
Means	30.092	69.8	.....	.558	.....	80.6	.....	..	..	..	.....	..	..	..
18 15	22.2	767.00	30.086	67.9	62.5	.508	.....	80.2	SSE.	..	..	1.0	Ci-cu., Cu-s.	45	..	..
19 15	22.	767.10	30.090	66.1	61.4	.495	.....	80.7	SSE.	..	..	1.0	Ci-cu., Cu-s.	45	..	..
20 15	21.8	767.05	30.091	64.6	60.5	.486	.....	82.2	SSE.	..	..	1.0	Ci-cu., Cu-s.	..	..	..
21 15	21.5	767.15	30.096	64.	60.5	.493	21h.	84.	SE.	..	..	1.0	Dark, clouds?	..	..	..
22 15	21.2	766.90	30.089	62.5	59.8	.490	(D. 57.4)	87.	SE.	..	..	..	Clear.	..	..	..
23 15	21.2	766.90	30.086	62.5	60.	.495	(A. 64.)	89.	SSE.	..	..	1.0	Dark, clouds?	..	..	..
Means	30.090	64.6	.....	.494	.....	83.8	.....	..	..	..	.....	..	..	..
0 15	21.	766.65	30.080	62.7	60.3	.501	.....	89.	SE.	..	..	.8	Ci-s., Cu.	..	..	..
1 15	20.9	766.65	30.080	62.5	61.	.524	.....	89.5	SE.	..	..	1.0	Ci-s., Cu.	..	..	..
2 15	20.7	766.40	30.071	62.8	61.1	.524	.....	90.	SE.	..	..	.9	Ci-s.	..	..	..
3 15	20.8	766.00	30.054	63.	61.3	.527	3h.	91.	S.	..	..	.7	Cu., Ci-cu.	..	..	..
4 15	20.3	766.60	30.081	63.	61.2	.524	(D. 54.5)	90.5	S.	..	..	1.0	Ci., Ci-cu., Ci-s.	..	..	..
5 15	20.3	766.10	30.060	63.	61.4	.530	(A. 63.)	91.	S.8	Cu., Ci., N.	202	270	270
Means	30.071	62.8523	90.3

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July 31, 22.]

METEOROLOGICAL TERM DAY.

[1841.

w. y.	Observatory time.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hyg., Sausure's	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 10ths.
		Temperature.	Obs'd height.	Corr. height.	Dry.	Wet.				Dr. points.	Force, lbs.			
5	15	23.	771.45	30.259	65.2	63.2	.537	...	88	SSW.	..	..	Cl.	.2
6	15	23.5	771.80	30.270	68.4	65.8	.605	...	87.6	SSW.	..	..	Cl.	.09
7	15	24.8	772.00	30.272	73.	69.	.658	...	81.5	SSW.	..	..	Cl., Ci-cu.	.3
8	15	26.	772.00	30.280	75.6	69.4	.644	61.5	77.	SSW.	..	..	Cl., Ci-cu.	.4
9	15	25.5	772.10	30.271	78.3	70.8	.661	...	75.	S.	..	..	Cl., Ci-cu.	.5
10	15	26.3	772.10	30.268	80.	72.3	.664	...	74.5	SE.	..	..	Cl-s, Cl., Ci-cu., Cu.	.7
11	15	...	...	...	73.4	...	.696	...	80.6	...	..	..	...	..
Means	...	...	...	30.270	73.4	...	...	...	...	...	..	..	...	..
12	15	27.6	771.90	30.265	81.5	72.5	.685	...	74.3	SE.	..	..	Cl-s, Cl., Ci-cu., Cu.	.8
13	15	...	...	...	...	...	...	...	...	...	..	..	...	..
14	15	28.	770.80	30.209	84.5	73.5	.689	...	68.5	SE.	..	..	Cl-s, Cl., Cu-s, Cu.	.9
15	15	28.6	770.40	30.190	83.	75.5	.784	63.8	71.3	SW.	.8	..	Cl-s, Cl-cu., Cl., Cu-s, Cu.	1.0
16	15	28.6	770.00	30.174	81.9	75.	.775	...	74.3	SW.	..	..	Cl-s, Cl-cu., Cl., S, Cu, W.	.9
17	15	28.4	769.70	30.164	80.8	72.6	.699	...	72.8	S.	..	..	Cl-s, Cl-cu., Cl., Cu.	.8
Means	...	...	...	30.198	82.3	...	.736	...	72.3	...	..	..	...	..
18	15	28.3	769.75	30.166	78.5	68.5	.578	...	76.	SSW.	..	..	Cl., Cl-cu., Cu-s.	.5
19	15	27.3	769.60	30.165	74.4	66.9	.573	...	78.5	SSW.	..	..	Cl., Cl-cu., Cl-s.	.4
20	15	26.5	769.70	30.174	71.5	68.	.641	...	79.8	SSW.	.5	..	...	.3
21	15	26.	770.10	30.191	70.	67.	.625	...	80.	Clear.	..	..	Clear.	..
22	15	25.7	770.15	30.194	68.9	66.7	.628	...	86.	SSW.	..	..	Clear.	..
23	15	25.9	770.00	30.190	67.6	66.	.620	...	91.5	SSW.	..	..	Clear.	..
Means	...	...	...	30.180	71.8	...	.611	...	82.	...	..	..	...	..
0	15	25.	769.80	30.184	67.5	66.	.631	...	92.5	SSW.	..	..	Cl-cu.	.1
1	15	24.6	769.50	30.184	67.3	65.6	.611	...	92.	SSW.	..	..	Cl-s.	1.0
2	15	24.3	769.60	30.166	68.	67.6	.664	...	91.8	SSW.	..	..	Cl-s, N.	1.0
3	15	24.2	768.65	30.143	69.3	68.	.646	...	92.	SSW.	..	..	Cl-s, N.	1.0
4	15	24.2	768.45	30.135	70.	69.	.628	...	92.7	SSW.	..	..	Cl-s, N.	1.0
5	15	24.2	768.60	30.141	70.4	69.5	.705	...	92.6	SW.	..	..	Cl-s, N.	1.0
Means	...	...	...	30.157	68.7	...	.660	...	92.3	...	..	..	...	..

Auever 21, 22.]

METEOROLOGICAL TERM DAY.

[1841.

A. m.	Observatory time.	Barometer.			Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gaussure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 10ths.
		Temperature, centigrade.	Ob'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6	15.....	26.4	764.25	29.959	72.6	72.	.788	.....	93.7	SW.	..	..	Ci., Ci-cu., Ci-s.....	.8
7	15.....	26.	764.25	29.960	73.5	72.7	.784	.....	92.	WSW.	..	..	Cu., Ci-cu., Ci-s.....	.7
8	15.....	26.6	764.20	29.956	75.5	73.6	.794	.....	87.5	WNW.	..	..	Ci., Ci-cu., Ci-s.....	.1
9	15.....	27.1	764.20	29.954	78.2	76.8	.850	72.	86.5	S.	..	..	Ci., Ci-s.....	.2
10	15.....	28.	764.20	29.949	80.5	76.2	.838	.....	82.7	NNW.	..	..	Cu., Ci-cu., S., Ci-s.....	.5
11	15.....	28.3	764.20	29.947	84.3	79.	.912	.....	83.5	S.	..	..	Cu., Ci-cu., S., Ci-s.....	.7
Means.....		.....	.....	29.954	77.4	.....	.824	.....	87.6	.....	..	..	.....	..
12	15.....	29.	763.80	29.928	85.1	78.7	.891	.....	81.	S.	..	..	Cu., Ci., Ci-cu., Cu-s, S.....	.4
13	15.....	29.3	763.10	29.899	84.5	78.3	.881	.....	81.5	SW.	..	..	Cu., Cu-s.....	.8
14	15.....	29.7	762.55	29.876	83.8	77.3	.845	.....	81.7	SW.	..	..	Cu., Ci., Ci-s., Cu-s.....	.9
15	15.....	29.7	762.25	29.864	83.9	78.4	.891	72.3	82.6	SW.	..	..	Cu., Ci., Ci-s., Cu-s.....	1.0
16	15.....	29.8	763.10	29.897	79.5	72.7	.716	.....	83.	SSW.	..	..	N., Cu-s.....	1.0
17	15.....	29.2	763.05	29.897	74.	71.7	.743	.....	88.	SE.	1.5	.07	N., Cu-s.....	1.0
Means.....		.....	.....	29.898	81.8	.....	.828	.....	83.	.....	..	..	.....	..
18	15.....	28.3	763.00	29.899	74.5	72.	.747	.....	91.	S.	..	.06	Cu-s, N., rain.....	1.0
19	15.....	27.9	762.65	29.889	73.9	71.5	.737	.....	93.	NNE.	..	.01	Cu-s, rain.....	1.0
20	15.....	27.2	762.55	29.887	73.5	71.4	.787	.....	93.	NE.	..	..	Cu-s, N., rain.....	1.0
21	15.....	27.5	763.75	29.933	71.9	70.8	.734	70.8	93.2	WNW.	.4	.01	Cu-s, N., rain.....	1.0
22	15.....	27.3	762.90	29.901	71.9	70.4	.719	.....	93.2	S.	..	.18	Cu-s, N., rain.....	1.0
23	15.....	27.	762.50	29.887	71.4	70.3	.722	.....	93.5	SW.	..	.11	Cu s, N., rain.....	1.0
Means.....		.....	.....	29.899	72.8	.....	.733	.....	92.8	.....	..	..	.....	..
0	15.....	27.	762.00	29.867	71.9	70.9	.737	.....	93.9	SW.	..	.10	Cu-s, N., rain.....	1.0
1	15.....	26.9	761.85	29.862	71.6	70.3	.720	.....	93.9	SW.	..	.02	Cu-s, N., rain.....	1.0
2	15.....	26.7	761.60	29.863	71.2	70.1	.717	.....	98.6	SW.	..	..	Cu-s, N., rain.....	1.0
3	15.....	26.2	761.75	29.862	71.5	70.3	.721	69.4	92.5	WSW.	..	..	Cu-s, N., rain.....	1.0
4	15.....	25.9	761.60	29.857	71.4	70.4	.725	.....	94.3	NNW.	..	..	Ci-s, N., rain.....	1.0
5	15.....	25.4	761.45	29.854	70.2	69.5	.707	.....	93.2	NNW.	..	..	Ci-s, Ci-cu.....	1.0
Means.....		.....	.....	29.859	71.3	.....	.721	.....	93.6	.....	..	..	.....	..

y. m.	Observatory time.	Barometer.			Therm'rs, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges &c.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 10ths.
		Temperature,	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6	15	18.5	766.15	30.071	59.2	58.9	.501	...	94.	NNE.	..	..	Fog.	1.0
7	15	18.7	766.25	30.075	60.7	60.2	.521	...	93.5	NNE.	..	..	Very dense fog.	1.0
8	15	18.8	766.50	30.083	61.6	61.	.534	...	93.5	NE.	..	..	Very dense fog.	1.0
9	15	19.	766.80	30.075	62.7	61.8	.545	...	92.7	E.	..	..	Very dense fog.	1.0
10	15	19.1	766.20	30.070	64.3	62.8	.557	...	91.3	E.	..	..	Very dense fog.	1.0
11	15	19.3	765.90	30.058	65.5	63.1	.553	...	89.	ESE.	..	..	Cu., S.	1.0
Means		...	...	30.072	62.3	...	.535	...	92.3	...	..	..	...	...
12	15	19.7	765.80	30.052	67.5	63.7	.548	...	85.2	E.	..	..	Cu., S. from E.	.9
13	15	20.2	765.00	30.017	68.7	63.5	.530	...	80.2	N.	..	..	Cu., S. from E.	.4
14	15	21.	765.00	30.013	70.	65.	.560	...	80.5	WSW.	..	..	Cu., S. from ESE.	.4
15	15	21.7	764.50	29.991	70.5	65.	.555	...	80.5	N.	..	..	Cu., S.	.3
16	15	22.3	764.15	29.974	72.	66.7	.593	...	79.9	NNE.	..	..	Cu., S. from NNE.	.6
17	15	22.5	763.90	29.963	71.	66.	.583	...	81.2	ENE.	..	..	Cu., Ci-cu. from ENE.	..
Means		...	...	30.002	69.9	...	.561	...	81.3	...	..	..	...	...
18	15	23.	761.00	29.965	68.1	64.	.550	...	84.2	E.	..	..	Cu., Ci-cu.	..
19	15	21.	764.20	29.983	65.	62.3	.535	...	89.	E.	..	..	Ci-c. at Hor.	1
20	15	21.	764.40	29.990	62.5	60.5	.509	...	90.	ESE.	..	..	Clear.	..
21	15	20.5	764.20	29.984	62.1	60.	.500	...	90.3	ENE.	..	..	Clear.	..
22	15	18.7	763.70	29.974	60.8	59.	.486	...	91.5	ENE.	..	..	Clear.	..
23	15	19.1	763.65	29.969	58.	57.2	.467	...	94.8	NE.	..	..	Clear.	..
Means		...	...	29.977	62.8	...	.506	...	90.	...	..	..	...	...
0	15	19.5	763.25	29.952	59.4	58.3	.483	...	91.	NE.	..	..	Cu., S.	.4
1	15	19.4	762.75	29.935	59.3	58.3	.483	...	94.	N.	..	..	Cu., S.	.5
2	15	19.4	762.40	29.919	59.6	58.5	.486	...	94.	NNE.	..	..	Cu., S.	.7
3	15	19.3	762.20	29.913	59.6	58.6	.488	...	94.	N.	..	..	Cu., S.	.8
4	15	19.2	763.15	29.949	59.1	58.5	.49	...	94.2	N.	..	..	Cu., S.	.9
5	15	19.1	763.80	29.955	59.5	59.1	.503	...	94.	N.	..	..	Cu., S.	1.0
Means		...	...	29.937	59.4	...	.489	...	94.	...	..	..	...	...

October 31, 22.]

METEOROLOGICAL TERM DAY.

[1941.

A. m.	Observatory time.	Barometer.			Therm's, Fah.		Force of vapor, lbs.	Dew point, Fah.	Hyg., Samsure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 10ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
18	15	14.	749.60	29.443	49.	46.	.293	.....	70.	WNW.	..	..	Cu.	1.0
19	15	13.8	750.00	29.459	49.8	45.5	.273	.....	70.5	WNW.	..	..	Cu. ? ..	1.0
20	15	13.3	750.55	29.483	47.5	42.5	.238	.....	69.5	WNW.	.4	..	Overcast.	1.0
21	15	13.	750.70	29.491	45.	42.	.250	.....	77.2	W.	2.4	..	Overcast.	1.0
22	15	12.9	750.60	29.488	45.	41.5	.240	.....	77.5	W.	1.8	..	Overcast.	1.0
23	15	12.5	750.40	29.492	44.5	40.8	.231	.....	78.3	W.	.2	..	Overcast.	1.0
Means	.....	.....	.....	29.474	46.8	....	.253	.....	73.8	.....	..	..	.....	.....
0	15	12.1	750.25	29.478	43.3	40.5	.238	.....	80.	W	..	..	S. ? ..	3
1	15	11.7	750.00	29.469	42.8	40.3	.240	.....	80.3	WSW.	..	..	S. ? N. ? ..	.7
2	15	11.5	749.90	29.467	43.	40.	.230	.....	83.	WSW.	..	..	S. ? Cu. ....	.3
3	15	11.	749.80	29.464	42.5	40.	.237	.....	83.	WSW.	..	..	S. ? around Hor.	.3
4	15	11.6	750.15	29.475	41.3	39.3	.234	.....	86.	WSW.	..	..	S, Cu. ....	.3
5	15	11.5	750.35	29.485	39.9	38.3	.231	.....	88.	SSW.	..	..	Ci-cn., S., Cu. ....	.7
Means	.....	.....	.....	29.473	42.1	....	.235	.....	83.4	.....	..	..	.....	.....

See meteorological observations on the magnetic term day.

NOVEMBER 23, 23.]

METEOROLOGICAL TERM DAY.

[184].

h. m.	Observatory time.	Barometer.			Therm'm, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Gauges's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 10lbs
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.				Dir. points.	Force, lbs.			
6	15	7.7	761.30	29.933	43.4	43.3	.393	...	93.4	NE.	..	.01	Cu.	1.0
7	15	8.	760.45	29.898	43.8	43.5	.396	...	93.3	SSE.	..	..	S., N., rain.	1.0
8	15	8.2	759.60	29.862	45.8	45.5	.317	...	93.	SE.	..	.02	S., N.	1.0
9	15	8.5	759.25	29.847	46.5	46.3	.327	...	93.	SE.	..	..	N., mizzling rain.	1.0
10	15	8.8	758.85	29.831	47.3	47.	.324	...	93.	SE.	..	.02	N., mizzling rain.	1.0
11	15	9.	758.25	29.807	47.7	47.5	.341	...	93.	S.	..	.02	N., rain.	1.0
Means		...	...	29.868	45.8	...	.318	...	93.1	...	..	..	...	...
12	15	9.	757.10	29.761	48.8	48.5	.352	...	93.2	SSW.	..	.05	N., moderate rain.	1.0
13	15	9.4	756.00	29.715	48.7	48.5	.363	...	93.	SSW.	..	.03	N., rain.	1.0
14	15	9.8	755.00	29.676	49.6	49.5	.366	...	93.3	S.	..	.01	N., S., rain.	1.0
15	15	10.	754.30	29.648	51.5	51.5	.393	...	94.5	SE.	1	..	N., S., rain.	1.0
16	15	10.3	753.90	29.630	57.6	57.5	.480	...	94.	S.	1	.05	N., S., rain.	1.0
17	15	12.	753.65	29.611	58.5	58.4	.495	...	93.5	S.	.8	.08	N., S., rain.	1.0
Means		...	...	29.673	52.5	...	.406	...	93.6	...	..	..	...	...
18	15	11.7	753.70	29.615	58.5	58.3	.492	...	93.2	S.	1.2	.04	N., S., rain.	1.0
19	15	12.	753.10	29.589	58.1	57.9	.486	...	93.5	S.	.8	.06	N., S., rain.	1.0
20	15	12.4	752.70	29.573	58.6	58.5	.497	...	93.5	S.	.4	.03	N., S., rain.	1.0
21	15	13.	752.25	29.551	58.5	58.1	.487	...	93.2	S.	1.0	..	N., S.	1.0
22	15	13.5	752.25	29.549	59.3	58.8	.496	...	93.2	SW.	1.2	..	N., S., rain.	1.0
23	15	13.9	752.85	29.571	59.5	57.5	.459	...	90.	NW.	1.5	.02	N.	1.0
Means		...	...	29.575	58.7	...	.486	...	92.8	...	..	..	...	...
0	15	14.5	753.20	29.582	57.2	55.5	.431	...	89.	WNW.	1.2	.06	S., N.	1.0
1	15	14.5	753.50	29.594	56.5	53.6	.390	...	79.	NW.	..	..	N.	1.0
2	15	14.5	754.40	29.630	54.8	50.	.319	...	76.3	NW.	1	..	Rain, N.	1.0
3	15	14.5	754.90	29.660	54.8	49.6	.310	...	76.	NW.	1	..	Rain, N.	1.0
4	15	13.9	755.40	29.671	53.	51.	.364	...	74.	NW.	1	..	Cu.	.5
5	15	14.2	755.50	29.675	52.	50.3	.356	...	74.	NW.	1	..	Cu.	.4
Means		...	...	29.634	54.7	...	.362	...	77.9	...	..	..	...	...

DECEMBER 21, 22.]

METEOROLOGICAL TERM DAY.

[1841.

[97]

486

A. m.	Observatory time.	Barometer.		Therm's, Fah.		Force of vapor, ins.	Dew point, Fah.	Hygr., Saunure's.	Wind.		Rain, inches.	Clouds, &c.	Sky covered, 10ths.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Dry.	Wet.			Dir. points.	Force, lbs.			
6	15	17.7	763.65	29.976	29.	26.2	.166	88.2	ENE.	1.3	..	N.....	1.0
7	15	18.	764.15	29.995	27.7	26.9	.167	89.5	ENE.	1.5	..	Cl-cu., Cl-s.	1.0
8	15	19.1	765.15	30.028	27.	26.1	.152	89.2	NE.	1.5	..	N, Cl-s.	1.0
9	15	20.	766.00	30.058	27.3	26.5	.155	89.3	ENE.	1.2	..	N, Cl-s.	1.0
10	15	21.	767.00	30.093	25.9	25.1	.148	89.5	ENE.	.7	..	N, Cl-s.	1.0
11	15	20.8	767.30	30.105	25.8	25.	.148	89.3	ENE.	.8	..	N, Cl-s.	1.0
Means		.....	.....	30.043	27.1	.....	.154	89.2	.....	..	..	.....	.....
12	15	19.8	767.10	30.103	25.4	24.8	.148	90.	ENE.	1.0	..	Cl-s, N.	1.0
13	15	19.3	767.70	30.129	25.5	24.6	.143	88.5	NE.	1.3	..	Cl-s, N.	1.0
14	15	19.3	768.00	30.140	26.	24.6	.139	85.	NE.	1.2	..	Cl-s, Cl-cu., N.	1.0
15	15	19.8	769.00	30.178	26.	24.6	.137	85.	NE.	.0	..	Cl-s, Cl-cu., N.	1.0
16	15	20.	770.50	30.233	25.7	24.5	.140	84.7	NNE.	.3	..	Cl-s, N.	1.0
17	15	20.2	771.10	30.256	26.3	25.	.140	83.2	NE.	..	..	Cl-s, N.	1.0
Means		.....	.....	30.173	25.8	.....	.141	86.1	.....	..	..	.....	.....
18	15	19.5	771.50	30.276	26.5	24.5	.132	81.	NNE.	..	..	Cl-s, N?	1.0
19	15	17.4	772.25	30.316	27.5	25.5	.135	80.	NNE.	..	..	Cl-s, N?	1.0
20	15	16.1	773.00	30.351	28.5	24.	.124	75.	NE.	..	..	Cl-s, N?	1.0
21	15	15.6	773.25	30.364	25.3	23.5	.137	75.8	NNE.	.2	..	Cl-s, Cu., Cl-cu.	1.0
22	15	15.	773.90	30.393	23.	20.8	.111	73.	NNE.	.2	..	Cl-s, Cu., Cl-cu.	1.0
23	15	14.5	774.25	30.408	22.	20.4	.113	73.2	NNE.	..	..	Cl-s, Cu., Cl.	.8
Means		.....	.....	30.351	25.1	.....	.124	76.3	.....	..	..	.....	.....
0	15	13.9	774.80	30.433	19.7	18.6	.110	74.	N.	..	..	Cl-cu., Cl-s. at Hor.	.2
1	15	13.3	775.00	30.445	18.6	17.2	.101	74.	NNE.	..	..	Cl-s.	.1
2	15	13.4	776.40	30.499	16.3	15.6	.102	73.8	NNE.	..	..	Clear.	..
3	15	14.2	776.45	30.498	16.2	15.5	.101	74.9	NNE.	..	..	Clear.	..
4	15	14.7	777.45	30.533	15.8	15.4	.105	75.	NNE.	..	..	Clear.	..
5	15	14.	777.80	30.544	15.	14.6	.101	74.3	NE.	..	..	Clear.	..
Means		.....	.....	30.492	16.9	.....	.103	74.3	.....	..	..	.....	.....

MAGNETIC OBSERVATORY,

AT THE

GIRARD COLLEGE, PHILADELPHIA.

ORDINARY MAGNETIC AND TRIPLE OBSERVATIONS,

FROM JANUARY TO JUNE, 1842.

GENERAL NOTES.

The instruments were as during the previous six months.

The correction for temperature of the vertical force instrument is 13.5 divisions for one degree of Fahrenheit, and of the horizontal force magnetometer from 2.7 to 2.6 divisions for one degree.

In November, 1841, a stove was placed in the observing room, to keep the temperature more nearly constant during the winter. The stove was of soapstone, the grate for burning anthracite; the pipe and other accessories were of copper. The pipe passed to the south of the declinometer, and was hung by copper wire to the ceiling of the observatory, about six feet above the case of the declinometer.

	h. m. 6 00 0 19½	h. m. 8 00 2 19½	h. m. 10 00 4 19½	h. m. 12 00 6 19½	h. m. 14 00 8 19½	h. m. 16 00 10 19½	h. m. 18 00 12 19½	h. m. 20 00 14 19½	h. m. 22 00 16 19½	h. m. 0 00 18 19½	h. m. 2 00 20 19½	h. m. 4 00 22 19½	Means.
Göttingen time.....	561.	560.6	551.2	555.	551.7	550.7	545.8	548.1	548.3	567.	564.2	575.	564.9
Observatory time.....	562.8	560.3	560.1	561.4	564.	557.3	543.1	544.9	546.6	549.5	551.9	551.6	564.4
Jan. 1.....	547.	551.4	554.6	558.7	557.4	560.4	553.2	552.	554.	557.3	559.8	559.1	556.4
2.....	556.	556.1	556.3	556.4	556.1	558.1	554.8	548.1	549.	572.	581.9	568.1	556.8
3.....	554.1	556.2	554.6	555.	552.3	557.8	550.5	552.3	552.6	562.5	577.9	571.4	559.8
4.....	572.6	567.4	566.3	573.1	570.6	565.5	563.2	559.6	565.3	567.2	569.2	568.5	567.3
5.....	566.2	566.8	567.9	568.1	575.1	566.5	559.	561.3	565.5	569.5	569.9	568.7	567.
6.....	565.4	565.7	565.9	565.8	570.4	565.6	555.5	559.8	564.6	563.7	566.5	564.4	564.4
7.....	569.4	573.3	570.1	567.1	576.	566.3	559.5	566.5	560.9	557.8	576.	.....	566.6
8.....	569.3	566.7	562.7	564.6	570.1	566.5	559.8	559.9	564.	564.	566.6	567.1	566.1
9.....	563.6	562.6	564.2	565.3	572.1	564.5	554.6	551.6	560.3	565.4	567.4	568.	563.3
10.....	562.	563.1	565.7	565.9	569.4	562.9	556.7	559.5	563.5	566.9	569.7	566.6	564.2
11.....	565.4	564.5	566.5	567.7	573.2	568.4	566.	559.4	565.	569.	568.7	610.	568.6
12.....	564.4	563.8	568.5	564.9	574.6	569.5	558.	556.	562.6	565.1	568.5	570.5	565.4
13.....	.....	564.9	565.7	568.8	573.6	565.9	550.7	546.6	560.2	573.7	563.8	579.1	566.6
14.....	568.5	563.6	566.8	567.7	576.9	568.5	555.2	555.1	562.3	562.5	564.1	569.4	566.
15.....	566.1	565.4	564.6	566.5	572.7	570.8	557.9	557.5	563.3	568.2	568.5	564.9	565.2
16.....	564.9	566.4	568.2	568.3	572.4	567.6	555.4	554.3	565.3	563.3	566.5	568.8	566.1
17.....	563.4	564.2	562.5	565.1	567.3	566.7	556.5	556.6	561.2	564.3	570.7	569.	563.9
18.....	564.7	564.5	563.9	563.6	567.4	562.7	554.2	556.	552.2	559.2	567.4	564.1	561.9
19.....	569.9	565.7	569.7	569.	570.6	569.7	561.5	560.2	563.6	565.5	566.3	566.4	566.4
20.....	563.4	563.3	566.	566.5	569.	556.	561.3	558.5	562.	563.3	563.5	564.9	563.1
21.....	567.7	563.7	565.4	.....	571.6	568.1	561.2	555.3	549.4	557.9	563.4	563.	562.4
22.....	562.6	562.5	564.2	566.	571.	569.4	564.5	555.3	562.	560.7	574.9	567.7	566.
23.....	564.9	566.7	566.6	564.5	569.6	572.5	559.5	560.	.....	562.1	564.	570.4	565.5
24.....	563.1	562.4	561.1	563.2	568.2	565.9	555.6	554.8	562.8	563.4	562.8	566.2	562.5
25.....	563.9	563.7	563.7	563.9	569.2	564.5	555.8	555.3	559.8	563.4	567.3	568.8	563.3
Means.....	563.9	563.7	563.7	563.9	569.2	564.5	555.8	555.3	559.8	563.4	567.3	568.8	563.3

Notes.—The observations from the 7th to the 29th inst. have been reduced to the standard of the 1st, by a correction of — 3.6.

[1842.]

VERTICAL FORCE MAGNETOMETER.

JANUARY.]

Göttingen time. Observatory time	h. m. 5 58 0 17½	h. m. 7 58 2 17½	h. m. 9 58 4 17½	h. m. 11 58 6 17½	h. m. 13 58 8 17½	h. m. 15 58 10 17½	h. m. 17 58 12 17½	h. m. 19 58 14 17½	h. m. 21 58 16 17½	h. m. 23 58 18 17½	h. m. 1 58 20 17½	h. m. 3 58 22 17½	Means.	Reduced to 32° F.
Jan. 1.....	589.	598.3	582.	572.6	592.4	527.5-	619.5	610.3	655.6	690.5	652.9	569.	605.	167.6
3.....	390.6	360.2	315.3	272.9	390.6	515.4	583.5	640.4	669.	705.1	692.	670.5	517.1	154.
4.....	641.7	675.3	669.3	668.2	672.1	699.4	697.8	707.2	713.3	732.7	739.	705.2	693.4	192.6
5.....	642.	640.4	661.9	641.1	632.1	653.8	649.4	650.6	655.3	644.	623.2	600.4	637.5	186.6
6.....	576.8	572.2	543.1	533.5	513.7	510.	547.6	590.6	585.3	582.3	587.2	600.4	561.9	167.7
7.....	614.8	661.	653.2	646.6	663.9	661.7	676.2	681.5	671.8	669.6	666.4	667.4	661.2	180.6
8.....	667.7	673.2	671.	672.	666.	656.7	692.5	741.5	773.3	758.5	720.	671.4	697.	192.1
9.....	693.	725.2	783.6	820.1	810.8	796.2	770.4	765.	771.7	769.2	780.1	776.1	771.8	188.6
10.....	803.7	800.	752.	758.5	778.3	780.5	805.	799.4	790.	770.	754.3	750.6	778.5	200.7
11.....	761.1	722.6	703.2	753.6	719.3	725.8	738.9	728.3	758.2	743.1	772.2	730.4	738.	203.4
12.....	756.9	755.7	743.1	771.2	707.	686.7	684.2	656.7	669.	710.7	677.7	630.7	704.1	196.5
13.....	646.7	654.6	652.2	618.5	629.1	653.7	680.	693.6	699.1	685.2	686.6	660.4	660.4	179.8
14.....	637.4	660.4	665.	666.7	661.2	678.2	691.3	743.8	779.3	695.2	656.7	616.5	691.2	197.1
15.....	594.8	635.3	694.8	737.8	748.3	732.6	745.7	737.5	734.6	734.	732.	717.7	712.1	189.7
16.....	.....	733.2	731.	745.1	713.7	757.1	812.4	797.6	780.	776.8	751.3	743.1	756.2	202.
17.....	636.9	733.5	773.	643.9	683.8	713.4	722.4	732.	768.7	767.9	749.7	748.4	733.	179.
18.....	717.	667.7	673.3	685.5	664.2	661.1	691.7	720.5	739.1	.....	.....	.....	691.1	178.1
19.....	.....	.....	.....	.....	.....	.....	.....	506.3	534.4	627.5	694.5	787.	619.9	171.7
20.....	734.2	700.9	667.	648.8	692.3	702.1	693.1	639.8	773.5	770.9	656.2	.....	697.5	208.8
21.....	479.	500.5	546.4	571.7	609.3	646.6	664.6	659.9	652.7	629.	560.7	505.5	585.5	214.3
22.....	528.	555.3	573.7	557.7	572.	528.7	600.4	619.3	632.9	630.9	643.4	663.6	692.2	212.9
23.....	674.8	718.9	716.1	667.4	655.8	656.4	695.2	723.3	744.6	745.	777.	785.3	713.3	226.
24.....	746.	709.8	732.5	784.6	770.2	728.2	672.7	681.7	688.9	664.7	615.2	623.3	701.5	229.
25.....	644.	680.1	677.4	660.7	656.	646.7	656.5	675.	682.1	681.	660.7	661.5	665.	219.5
26.....	657.3	678.	670.6	635.9	577.9	568.2	652.4	710.	749.1	779.2	776.9	774.	695.8	217.4
27.....	731.4	711.6	762.7	792.7	822.8	816.3	783.7	770.2	788.5	796.5	787.7	770.2	777.8	262.1
28.....	.....	660.9	664.5	661.1	664.	669.1	688.5	691.2	709.8	712.	700.4	680.3	678.4	.....
29.....	.....	189.8	204.2	199.4	196.8	186.2	193.1	178.2	188.7	211.2	216.8	214.6	.....	197.6
30.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means.....	648.6	660.9	664.5	661.1	664.	669.1	688.5	691.2	709.8	712.	700.4	680.3	678.4	.....
Reduced to 32° F.	192.3	189.8	204.2	199.4	196.8	186.2	193.1	178.2	188.7	211.2	216.8	214.6	.....	197.6

[1943.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

JANUARY.]

	h. m. 5 58 0 17½	h. m. 7 58 2 17½	h. m. 9 58 4 17½	h. m. 11 58 6 17½	h. m. 13 58 8 17½	h. m. 15 58 10 17½	h. m. 17 58 12 17½	h. m. 19 58 14 17½	h. m. 21 58 16 17½	h. m. 23 58 18 17½	h. m. 1 58 20 17½	h. m. 3 58 22 17½	Means.
Getting time.....	62.9	63.9	60.6	61.1	64.3	66.	64.	67.	72.	68.6	64.	58.3	64.4
Observatory time.....	50.6	48.1	44.2	42.3	54.	60.3	63.	69.	71.9	69.8	68.	65.9	58.9
	67.	69.1	67.2	63.3	69.3	70.3	69.	71.3	71.3	73.	72.	67.2	69.1
	64.7	67.2	66.5	64.9	66.	67.	67.	67.5	66.2	66.	68.	60.8	65.4
	62.	61.	59.	59.	57.6	58.3	61.5	64.	62.	63.6	69.	64.	61.2
	66.3	68.6	65.3	68.	67.8	68.	69.	68.	67.7	68.	67.4	67.9	67.6
	68.	68.3	67.	68.	66.	67.4	72.	74.	75.	72.	69.	66.	69.4
	70.9	74.2	77.8	78.2	75.9	75.	74.	75.	74.9	76.	75.7	75.9	75.2
	77.	74.8	73.	75.1	75.	75.5	77.	76.7	74.7	73.5	72.9	74.	74.8
	72.	69.3	70.5	72.7	70.	72.	70.7	73.3	74.	71.6	72.2	71.3	71.6
	73.6	72.7	72.3	71.2	67.8	69.8	68.1	68.	73.	69.5	68.8	64.	69.6
	68.	68.3	65.5	64.	66.5	66.2	70.	70.5	70.	68.	68.6	65.5	67.6
	66.6	67.8	67.	67.8	66.5	68.9	70.2	75.1	74.9	69.	65.2	63.8	68.9
	62.3	67.2	71.4	73.6	72.1	72.2	71.4	73.	72.1	71.8	71.	70.	70.7
	70.	74.	73.5	70.5	70.6	76.	77.9	77.	76.9	73.	72.6	63.	73.2
	70.	75.4	72.	68.	70.2	71.2	72.	74.4	76.	73.	73.	72.3	72.3
	68.9	67.2	69.5	69.5	66.7	69.5	71.7	73.8	73.6	67.	70.	72.	70.
	69.	67.1	64.3	66.3	69.2	67.8	68.8	66.9	60.	67.	70.	72.	65.2
	52.2	55.1	57.2	59.2	62.4	64.	66.	71.	75.	69.4	62.	65.2	66.2
	55.	58.	58.3	58.5	58.8	55.8	60.	63.8	62.	60.5	55.7	53.3	59.5
	66.1	69.2	66.	63.	64.	65.2	67.5	70.2	70.6	63.1	62.5	65.	60.1
	67.9	68.2	70.2	73.5	70.9	66.5	64.4	69.5	67.	70.	74.	71.5	68.1
	64.6	67.2	64.2	65.3	63.8	64.	64.3	67.3	67.	65.6	64.6	63.	67.
	65.5	66.	64.5	61.2	58.	61.	67.	70.8	72.	71.9	71.1	71.	66.7
	68.3	65.5	67.8	73.	74.	71.2	69.9	70.6	72.4	71.6	70.4	68.2	70.2
Means.....	65.8	66.9	66.1	66.3	66.7	67.7	68.7	70.	70.6	69.1	67.9	66.5	67.7

Correction for temperature, 13.5 divisions of the scale for one degree Fahrenheit.

[1842.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

JANUARY,]

Göttingen time. Observatory time.	h. m. 6 02 0 21½	h. m. 8 02 2 21½	h. m. 10 02 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 02 10 21½	h. m. 18 02 12 21½	h.° m. 20 02 14 21½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 02 20 21½	h. m. 4 02 22 21½	Means.
Jan. 1.....	57.4	58.1	56.	56.1	56.6	59.9	58.9	60.9	62.7	62.	60.	55.8	58.9
3.....	49.5	47.1	43.	40.1	46.2	50.7	52.3	57.8	60.	60.	65.6	56.9	52.
4.....	58.3	60.	60.1	60.6	61.9	62.9	62.3	64.	64.1	65.7	65.6	62.3	62.3
5.....	59.1	59.3	58.7	57.3	57.5	58.	57.3	59.	59.	58.9	57.4	55.6	58.1
6.....	56.8	55.	53.3	53.	51.7	52.3	56.2	57.	57.	58.	58.6	59.1	55.5
7.....	61.	62.4	60.8	61.8	62.6	63.	.....	64.	63.	63.	63.	63.	62.5
8.....	63.	63.1	62.	62.5	61.	61.4	64.5	66.5	68.	66.2	64.6	62.	63.7
10.....	65.2	67.2	69.9	70.9	69.6	68.8	67.8	69.2	68.	68.2	67.	66.9	68.4
11.....	69.1	67.9	66.1	67.	67.2	67.8	64.7	66.	67.	65.8	66.2	65.6	65.2
12.....	66.	64.2	64.	64.8	63.2	65.	61.	61.	61.4	61.2	60.	58.	62.3
13.....	65.9	66.	65.5	64.2	61.5	62.	62.8	63.5	64.1	62.8	62.5	63.3	61.6
14.....	59.	60.2	59.	57.8	59.	59.7	62.3	65.7	66.	65.8	65.8	59.	61.9
15.....	61.3	62.	61.5	61.5	60.5	61.8	65.3	66.2	66.2	65.3	66.	64.	64.
17.....	57.5	60.3	63.2	65.2	65.1	65.3	66.	66.2	66.2	67.8	66.8	60.1	66.3
18.....	.....	68.	65.7	64.	64.	67.2	69.	70.3	68.	69.	68.5	67.7	66.4
19.....	62.9	67.6	65.2	62.	63.2	66.3	66.	68.6	70.2	68.9	68.	67.8	66.3
20.....	65.3	63.7	64.5	64.5	62.5	64.7	67.	69.2	70.	68.9	68.	67.8	66.3
21.....	66.2	64.5	63.3	61.2	60.	57.	55.	54.3	56.	60.	61.2	61.5	60.
22.....	60.3	59.4	57.5	58.3	60.6	60.8	61.	62.9	64.9	61.4	56.6	52.	59.6
24.....	45.6	47.5	49.2	51.	53.6	55.1	56.2	57.	57.3	55.	51.5	49.3	52.3
25.....	49.7	51.2	51.4	51.7	52.3	50.3	53.5	57.	57.	57.7	57.8	58.5	54.
26.....	60.	62.	60.5	58.	56.5	59.7	61.3	64.2	65.	65.	67.1	65.9	62.3
27.....	63.3	63.	64.2	65.5	63.	60.	57.6	59.	59.	58.	56.8	60.3	60.3
28.....	59.1	60.	58.4	58.5	58.2	58.5	58.7	60.8	60.6	60.3	59.3	57.8	59.2
29.....	60.	60.3	58.5	58.	56.2	58.	61.9	65.5	67.2	68.	67.8	67.3	62.4
31.....	62.	61.8	65.	66.7	68.	67.	66.3	67.	68.	68.7	67.5	....	60.7
Means.....	60.1	60.8	60.2	60.1	60.2	60.9	61.4	63.3	63.8	62.3	62.6	61.1	61.5

Correction for temperature, 2.7 divisions of the scale for one degree Fahrenheit.

Degrees Fahrenheit.

	Declination.			Vertical force.				Horizontal force.				Tempera- ture Fah- renheit.
	<i>h. m.</i> 13 54 8 13½	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 06 8 25½	<i>h. m.</i> 13 52 8 11½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 14 04 8 23½	Tempera- ture Fah- renheit.	<i>h. m.</i> 13 56 8 16½	<i>h. m.</i> 14 02 8 21½	<i>h. m.</i> 14 08 8 27½		
Göttingen time.....	547.9	551.7	554.	590.	592.4	594.1	64.3	553.2	550.9	548.3	58.6	
Observatory time.....	563.3	564.	563.2	390.3	390.6	402.3	54.	495.	493.6	494.6	46.2	
Jan. 1.....	566.5	567.4	568.2	668.5	672.1	673.5	69.2	552.2	550.4	552.5	61.9	
3.....	561.	561.3	561.	630.8	632.1	632.9	66.	592.7	593.4	592.3	57.5	
5.....	563.	562.3	562.9	514.6	513.7	511.6	57.6	598.5	549.	540.	51.7	
7.....	573.4	574.1	574.	664.6	663.9	664.3	67.8	577.2	575.	576.	62.6	
9.....	578.3	578.6	579.	667.2	666.	665.1	66.	565.7	564.1	565.6	61.	
11.....	573.8	573.9	573.3	812.8	810.8	810.2	75.9	569.5	568.9	568.8	69.6	
13.....	578.5	579.5	579.5	777.5	778.3	780.7	75.	555.6	552.	548.8	67.2	
15.....	572.6	573.6	573.5	719.9	719.3	719.5	70.	564.7	564.1	558.3	63.2	
17.....	575.2	576.6	575.4	710.7	707.	703.6	67.8	561.6	559.2	556.7	61.5	
19.....	572.6	573.9	573.1	627.8	629.1	630.4	66.5	541.9	543.8	546.1	59.	
21.....	576.6	576.7	575.6	669.6	661.2	658.5	66.5	547.	547.2	550.4	60.5	
23.....	576.3	578.1	577.7	747.5	748.3	746.9	72.1	565.1	568.5	567.5	65.1	
25.....	575.4	577.1	576.8	712.6	712.7	714.4	70.6	552.7	548.9	549.	64.	
27.....	578.2	580.4	581.3	680.7	683.8	681.5	70.2	572.5	572.3	574.2	63.2	
29.....	575.9	576.2	576.8	665.3	664.2	662.6	66.7	568.6	568.1	566.9	62.5	
31.....	574.3	575.9	575.8	.....	.....	.....	.....	568.6	565.3	562.4	60.
	571.6	570.8	573.1	690.1	692.3	694.6	69.2	539.9	542.1	542.5	60.6	
	572.4	570.9	570.5	608.5	609.3	611.9	62.4	506.2	506.3	507.8	53.6	
	572.9	574.1	575.5	572.7	572.	571.7	58.8	530.8	532.7	530.5	62.3	
	571.9	572.5	572.5	656.7	655.8	655.4	64.	542.1	541.5	541.	58.5	
	576.1	575.1	574.8	773.2	770.2	772.4	70.9	552.6	551.1	550.8	63.	
	573.7	574.5	574.5	654.2	655.	651.6	63.8	532.2	531.2	530.5	58.2	
	573.6	573.1	574.2	579.4	577.9	574.6	58.	537.7	536.7	540.4	56.2	
	566.5	568.2	570.5	821.4	822.8	823.2	74.	570.1	568.6	568.4	68.	

The observations of declination from 7th to 29th inst. should have a correction of — 3.5 applied to them, to reduce them to the standard of the first day of the month.

[1949.]

DECLINATION MAGNETOMETER.

FEBRUARY.]

	<i>h. m.</i> 6 00 0 19½	<i>h. m.</i> 8 00 2 19½	<i>h. m.</i> 10 00 4 19½	<i>h. m.</i> 12 00 6 19½	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 16 00 10 19½	<i>h. m.</i> 18 00 12 19½	<i>h. m.</i> 20 00 14 19½	<i>h. m.</i> 22 00 16 19½	<i>h. m.</i> 0 00 18 19½	<i>h. m.</i> 2 00 20 19½	<i>h. m.</i> 4 00 22 19½	Means.
Göttingen time.....													
Observatory time.....													
Feb. 1.....	568.3	568.	564.5	566.7	565.6	555.4	547.	551.9	561.	559.7	575.9	565.4	560.6
2.....	560.5	558.9	559.9	547.	570.5	563.3	554.1	554.8	559.3	551.6	561.3	564.8	559.7
3.....	562.1	561.2	564.2	566.8	563.3	562.7	556.	564.8	559.8	559.4	566.2	570.	562.2
4.....	561.1	561.2	560.5	562.9	567.1	564.	554.	555.7	559.7	562.	565.5	566.9	561.7
5.....	567.2	564.8	566.2	564.9	569.8	567.8	560.1	558.1	560.8	562.3	562.9	564.8	564.1
6.....	573.	571.8	568.2	569.9	562.2	561.	556.8	560.7	570.5	563.	563.3	563.9	564.5
7.....	564.1	564.5	564.6	564.	568.9	.....	560.2	559.3	560.5	566.3	569.	566.5	564.3
8.....	565.5	563.7	562.5	564.	569.2	567.9	559.3	559.	563.3	563.9	566.2	565.	564.1
9.....	563.5	565.1	565.2	564.9	569.5	567.2	562.2	557.2	559.9	564.7	566.9	564.4	564.4
10.....	564.8	564.6	564.1	565.5	569.5	569.6	556.1	548.8	544.2	561.5	568.2	577.	562.6
11.....	575.8	566.5	557.8	570.6	570.	565.5	568.9	564.2	551.5	557.6	560.1	561.7	562.5
12.....	555.5	555.5	556.2	556.7	568.7	561.6	560.5	560.8	552.9	562.	565.6	570.1	569.8
13.....	566.	567.3	565.7	566.	569.6	569.4	563.8	561.8	562.6	561.9	565.1	565.5	565.4
14.....	567.6	565.2	567.2	565.3	566.5	.....	560.6	519.7	552.7	560.9	564.	562.7	562.
15.....	565.	567.2	564.8	560.3	566.5	565.2	554.2	559.1	558.	569.2	568.4	560.5	560.9
16.....	566.3	567.4	567.	568.3	559.6	558.1	555.5	552.	548.3	565.5	571.2	567.	562.2
17.....	567.	564.9	547.1	560.2	552.2	557.6	566.3	561.3	558.8	571.6	568.9	567.9	561.3
18.....	565.1	562.7	563.2	563.1	568.6	566.7	562.	569.	559.2	561.1	562.7	567.6	562.3
19.....	563.3	563.7	564.1	563.7	567.	564.3	558.3	558.	560.2	560.6	568.2	557.5	562.4
20.....	562.1	563.5	564.3	566.	567.3	567.3	556.9	556.9	559.2	561.7	562.3	569.7	563.2
21.....	565.8	568.7	574.1	575.4	571.6	567.	559.4	556.9	536.5	541.3	563.3	573.9	569.9
22.....	561.3	563.4	565.7	.....	568.	566.5	562.6	558.3	564.6	562.4	562.2	561.3	562.3
23.....	563.3	559.6	564.9	564.1	570.4	566.9	557.8	553.7	559.1	561.5	569.6	563.4	563.
24.....	565.4	565.3	564.2	566.9	572.5	566.8	557.8	555.4	560.8	565.3	569.6	566.	564.7
25.....	565.4	565.3	563.2	564.4	566.4	564.5	557.8	555.9	557.6	561.6	564.8	566.	562.5
26.....	565.4	565.3	563.2	564.4	566.4	564.5	557.8	555.9	557.6	561.6	564.8	566.	562.5
27.....	565.4	565.3	563.2	564.4	566.4	564.5	557.8	555.9	557.6	561.6	564.8	566.	562.5
28.....	565.4	565.3	563.2	564.4	566.4	564.5	557.8	555.9	557.6	561.6	564.8	566.	562.5
Means.....	565.	563.9	563.2	564.4	566.4	564.5	557.8	555.9	557.6	561.6	564.8	566.	562.5

FEBRUARY.]

VERTICAL FORCE MAGNETOMETER.

[1843.]

[97]

496

Göttingen time. Observatory time.	<i>h. m.</i> 5 58 0 17½	<i>h. m.</i> 7 58 2 17½	<i>h. m.</i> 9 58 4 17½	<i>h. m.</i> 11 58 6 17½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 15 58 10 17½	<i>h. m.</i> 17 58 12 17½	<i>h. m.</i> 19 58 14 17½	<i>h. m.</i> 21 58 16 17½	<i>h. m.</i> 23 58 18 17½	<i>h. m.</i> 1 58 20 17½	<i>h. m.</i> 3 58 22 17½	Means.	Reduced to 32° F.
Feb. 1	785.5	765.5	769.7	763.2	745.4	752.8	742.9	729.	720.8	719.3	723.7	745.1	745.1	269.9
2	702.7	687.8	701.3	730.	710.3	754.6	749.9	737.2	771.1	807.6	781.1	742.9	742.9	281.5
3	784.9	787.9	806.	820.3	821.1	844.6	837.3	817.8	797.7	799.	798.7	731.2	803.9	245.
4	857.3	864.6	870.5	884.	875.3	893.8	895.	870.5	846.7	826.1	813.6	793.6	857.6	268.3
5	778.	775.	789.7	719.1	675.1	618.5	605.8	605.8	596.6	583.7	564.5	543.2	651.6	284.2
6	701.4	667.2	610.8	575.	546.4	541.5	579.5	682.9	721.	737.9	765.4	765.4	657.9	267.8
7	781.8	803.7	818.9	815.1	796.9	.....	793.1	766.	758.1	741.	695.5	648.5	765.5	289.
8	618.4	605.5	572.2	533.5	550.7	596.1	638.5	655.	678.7	675.4	661.	629.6	617.8	277.6
9	641.6	688.2	734.7	725.4	723.	750.4	743.	782.2	783.2	782.	761.2	756.9	739.8	272.7
10	763.6	806.7	835.	823.5	840.7	816.3	793.9	773.8	779.4	761.6	744.	725.6	789.1	270.7
11	739.7	768.2	797.5	818.1	809.4	791.5	790.4	791.	775.2	769.5	769.3	744.6	783.1	271.4
12	737.4	753.1	820.	820.	819.	795.1	796.3	761.6	776.6	789.1	715.5	678.5	771.9	281.9
13 . . . . .	.....	694.1	689.9	701.4	695.	693.7	729.8	745.5	743.1	713.2	712.8	713.5	712.1	266.
14	701.8	724.	717.6	693.3	680.8	.....	701.2	707.5	707.1	699.	683.6	642.	698.4	272.5
15	612.9	644.5	711.7	675.4	665.7	521.9	696.7	584.5	583.4	578.	537.5	557.2	610.8	262.5
16	500.9	530.8	608.	635.8	689.9	694.5	690.	657.7	650.1	648.5	594.6	677.	639.	247.8
17	619.5	742.4	759.1	724.6	710.4	718.	715.5	695.8	719.9	733.1	635.9	612.3	700.5	236.7
18	457.1	520.	565.2	560.	567.9	573.2	583.3	618.8	627.4	659.3	673.5	669.6	599.5	212.8
19	682.5	634.7	648.6	676.9	674.	644.5	676.8	702.8	723.8	710.	698.2	649.	675.1	226.9
20	624.1	644.6	664.3	643.5	605.	620.1	650.2	637.6	639.9	608.5	581.5	567.2	623.	230.2
21	590.8	610.8	603.	617.	623.1	636.3	644.5	643.7	641.2	627.7	608.4	614.1	621.7	192.8
22	600.3	613.7	621.8	.....	602.7	607.6	629.4	627.5	622.8	619.9	618.3	639.	617.8	204.7
23	631.8	638.2	648.6	676.6	677.8	656.7	646.3	654.5	657.1	658.	646.	626.2	652.3	212.2
24	573.9	540.2	503.5	475.	537.1	620.8	657.9	688.2	736.9	765.8	751.8	756.8	632.3	193.6
Means	677.1	689.7	700.7	700.3	692.6	689.1	704.3	706.8	710.3	708.6	688.5	675.8	695.5	
Reduced to 32° F.	253.2	248.3	259.3	253.9	252.5	240.9	245.3	237.	237.8	256.4	252.5	249.2		249.3

[1842.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

FEBRUARY.]

	h. m. 5 58 0 17½	h. m. 7 58 2 17½	h. m. 9 58 4 17½	h. m. 11 58 6 17½	h. m. 13 58 8 17½	h. m. 15 58 10 17½	h. m. 17 58 12 17½	h. m. 19 58 14 17½	h. m. 21 58 16 17½	h. m. 23 58 18 17½	h. m. 1 58 20 17½	h. m. 3 58 22 17½	Means.
Göttingen time.....	69.1	69.4	69.	67.7	67.6	67.9	66.4	67.	65.8	65.9	66.4	65.	67.2
Observatory time.....	63.1	63.3	66.2	66.5	67.	69.3	67.4	71.	77.	70.4	69.7	70.6	68.4
	70.8	71.7	73.6	72.5	74.7	76.	74.5	....	72.5	72.	73.	75.6	73.4
	76.7	76.8	78.2	77.9	77.3	79.7	78.3	76.3	74.7	73.3	72.1	71.4	76.1
	70.	68.7	67.3	65.2	62.	59.8	59.2	59.1	57.6	54.7	53.5	52.	60.7
	62.7	59.2	55.7	53.4	52.5	52.8	58.	65.3	65.7	68.1	68.7	68.5	60.9
	70.7	72.1	72.2	70.8	69.3	....	69.3	66.9	66.6	65.	59.8	57.8	67.3
	55.8	54.9	52.	49.9	52.8	56.6	59.3	61.5	69.1	59.2	59.	57.1	57.2
	59.3	64.1	66.2	65.4	65.3	67.3	67.5	71.3	69.3	68.8	67.	68.3	66.6
	68.1	74.4	71.9	73.8	73.5	71.	71.1	71.4	69.	68.	66.5	65.2	70.4
	65.7	71.5	70.	73.	70.3	69.9	70.9	69.5	70.7	66.1	63.2	59.8	68.3
	....	65.7	62.	63.7	63.	63.5	67.	69.2	66.4	63.3	65.7	64.8	64.9
	62.8	65.3	62.7	62.6	62.8	....	64.7	66.5	64.4	64.	62.5	59.2	63.4
	60.2	64.	62.6	60.4	59.8	55.8	56.5	56.7	56.1	54.2	53.2	53.9	57.8
	52.6	53.2	59.7	60.	62.2	64.	63.2	61.8	62.3	62.3	64.8	62.2	60.8
	19.	62.2	68.8	67.	68.2	70.2	67.6	68.6	70.6	67.5	60.1	64.	67.1
	50.4	56.6	57.	57.2	58.	58.0	60.4	63.2	62.7	65.	64.8	64.7	59.9
	63.3	61.4	64.2	65.3	64.3	63.7	67.8	70.8	68.3	67.3	64.6	61.6	65.2
	61.3	59.3	59.2	61.3	60.5	62.	68.3	64.	63.1	60.5	56.3	59.1	61.1
	61.4	62.	61.4	62.2	62.4	64.1	65.4	67.3	66.8	65.6	63.6	62.8	63.7
	62.	63.6	....	....	61.1	62.1	62.9	62.3	63.7	61.9	62.3	63.8	62.6
	63.3	63.7	66.1	67.3	65.2	63.6	64.9	66.5	65.2	64.7	63.2	62.3	64.6
	58.3	55.7	53.	54.2	60.8	64.9	66.5	71.	74.8	73.8	70.9	70.4	64.5
Means.....	63.4	64.7	64.7	64.7	64.6	65.2	66.	66.8	67.	65.5	64.3	63.6	65.

Degrees Fahrenheit

FEBRUARY.]

HORIZONTAL FORCE MAGNETOMETER.

[1842.]

[97]

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Station time. Observatory time	h. m. 6 02 0 21½	h. m. 8 02 2 21½	h. m. 10 02 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 02 10 21½	h. m. 18 02 12 21½	h. m. 20 02 14 21½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 02 20 21½	h. m. 4 02 22 21½	Means.	Reduced to 32° F.
Feb. 1.	578.3	565.	560.6	553.8	559.8	571.8	580.7	572.7	550.3	563.	590.6	567.4	569.5	488.5
2.	571.7	560.4	552.2	546.1	555.6	567.3	566.8	589.3	568.9	573.3	580.8	583.6	573.7	490.8
3.	584.8	588.1	591.1	596.2	597.8	617.	630.	631.1	606.	618.3	602.1	612.6	606.3	502.4
4.	613.4	614.8	614.6	615.7	625.5	635.3	650.6	636.	619.4	619.7	621.6	613.6	623.3	509.4
5.	613.7	611.6	601.3	584.8	575.2	573.	579.	567.3	556.1	558.	556.	557.3	578.	504.3
6.	603.7	601.1	585.9	569.2	593.8	578.*	569.5	580.7	601.1	591.6	593.5	592.5	588.4	516.9
7.	590.	589.3	578.4	573.6	570.5	567.9	610.6	593.1	561.1	590.9	549.7	539.1	577.8	497.1
8.	530.	520.7	524.	511.4	515.3	533.9	554.8	541.5	536.	534.3	537.7	536.4	531.3	483.5
9.	534.6	529.	546.6	546.6	538.3	555.9	580.1	591.8	565.9	566.1	571.3	575.1	557.6	478.5
10.	569.	565.8	572.5	555.2	560.8	566.9	580.7	591.3	568.9	598.7	646.5	644.9	595.8	504.8
11.	648.7	644.7	623.2	601.4	591.7	596.5	592.7	600.	600.4	593.5	593.	610.5	607.9	514.8
12.	574.1	564.8	572.2	579.	580.3	577.5	591.4	596.5	586.2	574.5	559.4	564.3	576.7	491.9
13.	543.7	544.5	544.7	540.7	538.9	543.1	558.3	545.4	551.6	561.7	553.6	564.1	548.6	481.9
14.	557.6	560.4	560.6	563.2	557.	564.5	596.	561.8	559.4	553.5	553.6	611.3	576.5	504.1
15.	596.4	561.	552.7	555.	569.4	535.6	567.1	528.	537.5	537.2	543.7	548.	545.9	497.6
16.	549.2	533.6	541.	534.7	565.2	553.6	593.8	589.6	590.4	590.	594.3	596.8	569.3	507.6
17.	585.	599.1	615.2	605.	625.	602.4	636.1	575.5	571.4	580.3	575.2	546.1	593.	510.4
18.	535.1	539.4	544.9	542.6	541.3	554.8	555.5	551.1	582.1	560.3	568.2	561.7	550.6	490.7
19.	559.1	558.	549.9	549.9	555.7	554.1	560.6	565.8	566.9	568.4	568.4	568.4	559.9	483.1
20.	558.4	550.2	543.	552.	543.8	558.2	560.2	562.4	553.9	552.8	562.2	551.7	553.7	485.4
21.	553.7	564.2	546.8	546.	535.7	579.1	636.7	631.8	649.7	658.	656.	634.	599.1	522.2
22.	610.9	608.2	602.8	.....	585.2	591.3	564.4	571.7	593.5	574.7	592.	595.5	590.	515.2
23.	595.	577.2	594.4	588.8	598.2	610.4	612.5	598.	586.3	588.	594.3	583.7	593.9	514.3
24.	571.6	566.7	552.1	534.3	543.2	571.	563.2	568.2	563.5	564.8	602.6	596.	568.	499.7
Means	576.1	571.6	569.6	562.8	565.5	576.6	590.4	580.	576.9	580.4	585.4	580.9	576.4	
Reduced to 32° F.	503.2	496.	493.7	487.5	490.4	499.1	511.6	499.3	495.4	500.8	508.7	506.4		499.4

[1942.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

FEBRUARY.]

Göttingen time..... Observatory time.....	h. m. 6 02 0 31½	h. m. 8 03 2 21½	h. m. 10 03 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 03 10 21½	h. m. 18 02 12 31½	h. m. 20 02 14 31½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 02 20 21½	h. m. 4 02 22 21½	Means.
Feb. 1.....	65.6	64.5	63.2	62.3	61.7	61.9	61.2	61.2	60.7	60.5	60.8	61.	62.
2.....	59.	59.5	60.4	60.5	61.	63.	62.	65.	66.1	65.2	65.2	66.2	62.7
3.....	66.8	67.9	69.7	69.6	70.5	72.	72.3	71.2	71.	71.	71.4	73.	70.5
4.....	74.	74.2	75.7	75.5	75.	77.	76.3	75.	73.2	72.7	71.6	70.5	74.2
5.....	69.	67.9	66.2	64.2	60.8	58.1	57.	56.	55.5	53.8	52.	50.7	59.3
6.....	60.2	57.6	54.7	52.5	51.5	51.8	55.8	61.	62.	64.6	65.	65.	58.5
7.....	66.1	66.8	66.5	65.3	63.8	66.7	65.	61.	59.8	58.	58.	50.5	61.9
8.....	48.5	47.	45.	44.	46.3	49.3	51.	54.	53.2	53.	53.5	52.1	49.7
9.....	53.5	57.4	59.2	59.4	59.5	61.1	61.8	65.4	66.	65.	63.5	63.9	61.3
10.....	63.4	67.3	66.	67.	66.9	66.	66.	67.	67.5	65.5	64.4	62.7	65.7
11.....	64.3	66.7	66.	68.	66.5	66.3	67.6	67.	67.5	67.	66.	64.5	66.4
12.....	62.7	64.3	67.3	67.5	67.	66.	66.	64.3	64.6	60.9	57.4	53.	63.4
13.....	51.7	55.6	53.8	54.9	56.1	56.	58.3	59.8	59.4	57.8	58.8	58.5	56.7
14.....	57.3	59.7	58.7	58.4	57.5	59.4	60.3	61.4	60.6	59.5	58.2	54.6	58.8
15.....	53.5	54.4	53.5	51.1	50.3	48.	48.	47.6	49.8	47.9	47.2	47.9	49.9
16.....	47.	47.5	52.3	52.8	54.9	56.9	57.2	56.3	56.8	57.7	56.8	59.	54.9
17.....	58.6	64.3	64.6	64.7	65.6	66.5	64.3	63.8	64.7	62.2	55.8	56.3	62.6
18.....	45.7	49.8	51.4	51.3	53.3	58.2	54.1	56.6	57.	59.2	59.6	59.1	54.2
19.....	57.7	56.	57.6	59.	58.6	58.3	61.5	63.5	63.4	62.6	60.5	57.2	69.7
20.....	56.2	58.1	58.1	56.	55.9	57.3	58.	58.8	59.	57.7	56.	56.	57.3
21.....	56.7	58.6	57.7	59.7	59.3	60.6	61.6	62.9	63.6	63.1	61.4	60.4	60.5
22.....	59.5	60.5	59.9	58.7	58.3	58.7	60.2	60.3	59.8	59.3	59.2	61.	59.7
23.....	60.3	60.7	62.6	63.8	62.6	61.5	61.5	62.1	62.2	62.2	59.9	59.7	61.5
24.....	56.1	53.7	51.2	51.	52.3	61.4	62.7	65.9	70.8	70.7	68.4	67.9	61.
Means.....	59.	60.	60.1	59.9	59.8	60.7	61.2	61.9	62.2	61.5	60.4	59.6	60.5

Degrees Fahrenheit.

[1842.]

TRIPLE OBSERVATIONS.

FEBRUARY.]

	Declination.			Vertical force.			Horizontal force.			
	<i>h. m.</i> 13 54 8 13½	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 06 8 25½	<i>h. m.</i> 13 52 8 11½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 14 04 8 23½	<i>h. m.</i> 13 56 8 15½	<i>h. m.</i> 14 02 8 21½	<i>h. m.</i> 14 08 8 27½	Tempera- ture Fah- renheit.
Feb. 1	563.4	565.6	568.4	745.2	745.4	748.7	558.3	559.8	562.5	61.7
2	569.5	570.5	570.8	708.2	710.3	710.8	559.7	555.6	554.8	61.
3	567.	562.7	564.2	817.2	821.1	821.	597.5	597.8	596.1	70.5
4	567.1	567.1	567.3	875.2	875.3	876.3	624.8	625.5	625.4	75.
5	570.1	569.8	570.	677.5	675.1	672.9	.....	579.2	579.	60.8
6	565.4	562.2	566.3	546.9	546.4	546.6	581.5	593.8	612.2	61.5
7	566.8	568.9	569.8	799.6	796.9	795.7	569.2	570.5	570.8	63.8
8	568.5	569.2	569.	548.5	550.7	553.2	515.6	515.3	515.	46.4
9	568.6	569.5	569.2	722.2	723.	723.5	538.2	538.3	537.5	59.5
10	567.	569.5	568.7	840.1	840.7	839.3	561.8	560.8	560.6	66.9
11	573.4	570.	573.	810.3	809.4	808.2	591.6	591.7	591.5	66.5
12	569.9	568.7	561.2	817.1	819.	815.	579.2	580.3	577.3	67.
13	568.	569.6	571.7	695.5	695.	694.4	538.4	538.9	538.2	56.1
14	569.	566.5	573.2	678.7	680.8	681.3	557.6	556.8	556.8	57.5
15	566.5	565.5	560.7	669.9	665.7	663.4	506.2	509.4	509.2	50.3
16	567.9	569.6	569.8	670.1	669.9	670.8	562.3	565.2	554.2	54.9
17	564.	562.3	548.6	.....	710.4	678.3	624.2	625.	629.7	65.6
18	567.7	568.6	568.5	569.	567.9	565.3	543.9	541.3	544.8	53.3
19	565.	567.	566.5	673.	674.	673.8	556.3	555.7	557.2	58.6
20	568.	567.3	568.7	606.9	605.	603.7	551.4	549.8	550.4	55.9
21	573.5	571.1	571.2	624.2	623.1	622.8	537.4	535.7	541.8	59.3
22	567.4	568.	568.	602.3	602.7	603.	584.4	585.2	585.2	58.3
23	570.3	570.4	571.1	679.7	677.3	677.3	596.7	598.2	597.1	62.6
24	572.	572.5	572.4	532.6	537.1	542.1	542.8	543.2	542.9	52.3

March.]

DECLINATION MAGNETOMETER.

[1942.]

	A. m. 6 00	A. m. 8 00	A. m. 10 00	A. m. 12 00	A. m. 14 00	A. m. 16 00	A. m. 18 00	A. m. 20 00	A. m. 22 00	A. m. 24 00	Means.
Göttingen time	0 19½	3 19½	4 19½	6 19½	8 19½	10 19½	12 19½	14 19½	16 19½	18 19½	20 19½
Observatory time											
Mar. 1.....	569.7	563.5	568.6	567.4	570.6	566.4	568.9	565.8	564.5	561.4	565.6
2.....	563.2	564.4	567.9	566.8	562.4	566.4	561.8	569.4	568.2	561.4	565.9
3.....	568.9	564.5	565.5	566.6	573.7	568.8	568.7	566.9	568.1	560.1	564.3
4.....	564.3	569.2	568.3	563.	568.2	565.6	569.4	568.4	567.3	565.	566.
5.....	564.3	562.8	.....	564.9	570.8	566.8	564.3	569.8	562.	569.2	565.2
6.....	569.2	566.9	566.	564.5	570.1	562.6	565.6	568.2	561.5	563.5	564.
7.....	564.3	565.3	563.9	565.7	570.2	565.7	563.8	567.7	561.6	561.9	563.2
8.....	565.2	567.5	567.	565.5	572.9	570.2	564.	564.5	562.7	563.2	564.5
9.....	567.7	566.1	566.4	566.7	571.1	569.4	560.7	566.9	563.6	564.9	565.5
10.....	565.3	564.7	566.	565.8	571.7	569.9	568.3	565.8	560.1	564.5	564.6
11.....	567.5	566.	568.8	572.1	571.6	568.7	567.5	567.1	561.2	562.7	565.3
12.....	568.9	566.5	573.6	575.5	576.	566.3	568.9	561.1	567.8	569.8	566.3
13.....	563.9	564.4	562.5	563.4	575.1	566.6	567.1	567.5	565.7	564.7	560.4
14.....	561.7	565.9	562.4	566.6	575.	574.8	567.8	563.2	561.4	567.4	563.
15.....	576.6	562.	567.1	565.6	570.4	569.7	568.2	562.5	564.7	567.3	561.4
16.....	562.3	562.5	566.4	571.3	570.8	566.3	568.9	562.4	565.8	561.6	562.
17.....	565.7	566.1	572.2	566.7	562.5	563.7	562.7	568.	563.4	561.4	562.
18.....	563.5	564.1	568.1	568.1	572.	567.	566.6	564.6	567.4	569.7	563.4
19.....	563.5	564.2	564.2	566.5	568.6	.....	569.8	562.5	566.7	569.1	560.7
20.....	569.8	563.9	565.9	560.9	577.	563.2	562.2	561.6	568.	561.9	562.
21.....	564.9	566.9	567.6	561.9	572.9	566.	562.2	560.9	569.4	572.5	562.5
22.....	562.8	563.1	567.	569.1	573.6	560.3	563.	569.2	568.5	571.	562.6
23.....	568.7	568.	564.5	566.7	570.8	564.3	563.2	564.9	566.7	560.8	561.2
24.....	569.	568.3	563.6	565.6	570.4	568.9	563.2	565.3	565.3	565.3	560.2
25.....	560.4	560.	560.8	566.7	569.5	565.2	569.1	565.3	561.4	567.5	561.5
26.....	570.2	567.2	561.1	564.2	563.3	563.8	566.7	562.5	561.5	565.9	560.2
27.....	558.3	557.2	556.4	562.6	570.4	567.5	553.3	561.8	549.	553.9	560.
Means	565.2	564.1	564.8	565.8	570.8	566.2	565.6	562.4	565.4	560.2	565.9
											562.5

[1842.]

VERTICAL FORCE MAGNETOMETER.

Mars.]

Göttingen time. Observatory time.	<i>h. m.</i> 5 58 0 17½	<i>h. m.</i> 7 58 2 17½	<i>h. m.</i> 9 58 4 17½	<i>h. m.</i> 11 58 6 17½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 15 58 10 17½	<i>h. m.</i> 17 58 12 17½	<i>h. m.</i> 19 58 14 17½	<i>h. m.</i> 21 58 16 17½	<i>h. m.</i> 23 58 18 17½	<i>h. m.</i> 1 58 20 17½	<i>h. m.</i> 3 58 22 17½	Means.	Reduced to 32° F.
Mar. 1.....	737.1	707.2	694.4	672.1	655.2	703.5	702.4	703.8	742.7	730.	723.	719.2	719.	207.8
2.....	708.5	708.9	712.7	741.5	761.8	749.5	737.5	730.3	733.7	740.9	744.	736.2	732.5	203.8
3.....	723.8	715.9	728.	744.5	767.	772.	769.4	768.9	779.5	788.5	800.5	809.9	763.2	198.9
4.....	796.7	791.1	782.1	770.7	766.3	773.4	776.	770.9	793.	793.7	797.	789.9	782.7	203.5
5.....	781.7	762.2	.....	720.7	696.9	693.6	692.2	697.8	691.8	685.3	685.4	688.5	700.4	196.9
6.....	589.5	615.9	737.	644.	663.	654.4	656.1	658.8	658.	658.3	658.4	635.	651.5	201.6
7.....	612.8	596.4	651.7	590.1	611.	637.6	631.1	635.3	644.5	647.5	632.7	606.5	618.5	194.6
8.....	597.4	624.5	653.8	692.3	630.6	619.1	591.5	599.5	616.2	641.	636.	638.7	626.7	197.4
9.....	643.5	678.2	682.3	696.1	703.2	710.3	723.	735.	748.7	746.6	736.4	718.5	710.1	198.4
10.....	696.5	689.8	645.9	616.2	578.4	556.	599.	674.7	706.4	675.5	639.3	608.2	638.7	208.
11.....	593.2	630.1	630.	628.3	616.2	583.4	541.1	562.7	612.1	631.6	634.7	594.7	603.2	192.8
12.....	513.3	587.3	558.7	602.4	623.1	636.	643.5	655.	684.4	700.1	686.1	684.5	638.7	196.7
13.....	676.	656.2	652.6	655.4	649.7	643.5	666.5	682.	674.6	663.5	656.1	607.6	657.4	207.5
14.....	589.6	603.4	631.5	636.9	635.4	655.	672.3	676.	667.7	656.	643.5	632.6	641.7	201.6
15.....	639.4	638.2	627.7	621.	597.9	619.5	642.3	650.1	663.7	676.1	711.2	728.3	651.1	197.5
16.....	729.9	722.	735.7	756.8	768.5	763.3	756.2	764.8	756.3	758.	749.2	734.8	748.1	210.8
17.....	722.3	711.8	767.	695.1	691.4	686.1	697.9	683.7	711.	724.9	735.5	734.3	712.6	203.7
18.....	611.8	601.1	626.6	653.5	651.9	643.8	640.6	637.5	632.2	625.3	609.1	603.9	638.2	200.3
19.....	606.2	614.5	631.1	640.1	637.	.....	.....	638.7	623.6	628.	626.8	626.8	636.9	198.1
20.....	597.4	584.4	608.1	600.6	558.6	603.7	646.8	665.	632.	658.2	630.	631.1	619.7	195.8
21.....	634.2	643.	656.2	662.	655.2	642.	655.8	662.5	674.7	668.4	638.	611.4	650.3	203.5
22.....	615.	617.3	637.	633.4	629.7	601.9	596.1	629.5	632.1	642.3	643.1	641.2	635.7	200.5
23.....	651.3	665.3	664.9	664.6	638.6	658.5	658.5	650.4	661.	645.3	602.9	556.7	643.2	204.5
24.....	514.9	618.1	632.4	661.5	664.6	632.1	626.2	661.	672.5	656.2	623.7	583.2	620.5	184.5
25.....	585.5	635.3	599.9	599.8	613.3	654.7	700.6	700.6	744.5	726.3	729.7	642.2	662.9	193.9
26.....	609.7	636.8	676.9	698.7	707.7	701.	711.7	727.1	757.9	775.5	778.7	789.7	714.3	189.1
27.....	781.9	763.2	749.7	732.7	731.1	746.1	722.	658.8	596.3	625.9	632.9	648.3	699.1	202.3
Means.....	650.	655.7	664.8	667.4	663.2	666.2	670.2	677.1	693.9	698.2	679.5	664.5	668.9	
Reduced to 32° F.	204.5	196.7	203.1	204.4	204.2	201.8	192.3	193.	198.5	202.2	212.4	208.2		199.6

[1842.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

MARCH.]

	<i>h. m.</i> 5 58 0 17½	<i>h. m.</i> 7 58 2 17½	<i>h. m.</i> 9 58 4 17½	<i>h. m.</i> 11 58 6 17½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 15 58 10 17½	<i>h. m.</i> 17 58 12 17½	<i>h. m.</i> 19 58 14 17½	<i>h. m.</i> 21 58 16 17½	<i>A. m.</i> 23 58 18 17½	<i>h. m.</i> 1 58 20 17½	<i>h. m.</i> 3 58 22 17½	Means.
Göttingen time.....	59.7	67.5	67.3	66.2	69.5	68.9	68.9	70.3	72.5	70.	70.3	69.1	69.3
Observatory time.....	66.4	69.5	71.3	72.8	72.	71.2	71.2	71.5	72.2	72.3	76.2	70.5	71.3
Mar. 1.....	69.3	69.9	72.	74.2	74.3	73.6	73.7	74.6	75.1	76.2	76.2	76.1	73.8
2.....	75.	74.2	74.7	73.3	73.7	74.2	74.2	76.2	76.3	76.8	75.7	74.6	74.9
3.....	73.2	72.2	....	69.	68.2	68.4	68.4	69.9	69.9	69.2	67.	65.4	69.3
4.....	72.4	64.6	65.2	65.2	66.	66.	66.	66.3	66.6	66.7	65.8	63.6	65.4
5.....	62.4	60.5	60.5	62.5	64.2	65.	65.2	66.	66.	65.3	62.	61.4	63.4
6.....	62.	65.5	66.	66.5	62.4	62.4	61.5	62.2	64.4	64.8	63.5	63.6	63.8
7.....	66.9	68.2	68.7	68.8	69.7	70.5	72.	72.7	72.	71.3	69.7	68.6	69.9
8.....	66.8	65.2	63.6	61.1	59.3	58.7	65.2	70.	68.1	65.	63.2	60.8	63.9
9.....	62.3	64.7	64.	63.7	62.	59.1	57.3	63.8	64.2	65.9	62.2	59.5	62.4
10.....	55.5	59.9	61.5	63.	62.8	63.9	65.	66.5	69.1	68.	66.6	67.7	64.
11.....	65.7	64.4	64.9	64.5	64.	64.7	68.	67.6	71.3	66.7	63.3	61.	65.4
12.....	60.1	63.5	64.8	63.3	63.7	65.8	66.6	68.5	66.8	65.2	63.5	71.4	64.6
13.....	64.3	64.3	63.2	61.4	61.4	64.	65.5	66.3	66.6	68.3	71.2	71.4	66.6
14.....	69.1	70.1	71.2	73.2	72.	72.2	73.1	73.6	73.1	72.5	71.	70.3	71.8
15.....	70.	68.2	68.	67.6	66.8	67.9	69.	71.6	71.6	72.2	72.	71.3	69.7
16.....	62.2	62.7	66.	65.8	65.	63.7	64.5	64.5	63.6	62.	61.7	62.4	63.7
17.....	62.5	63.9	64.7	65.	64.4	....	65.5	63.9	63.7	64.	63.3	62.4	63.9
18.....	60.8	61.4	63.	60.	58.4	64.	66.8	66.9	67.1	65.7	63.	64.	63.4
19.....	65.	65.7	65.3	66.3	64.5	64.7	66.4	66.6	67.3	65.5	62.	62.1	65.1
20.....	62.8	68.1	62.8	64.2	64.2	64.2	63.1	64.9	64.3	65.1	64.	65.	65.5
21.....	66.1	67.1	66.5	64.2	64.6	66.6	65.	66.	66.	63.2	60.	58.8	64.5
22.....	55.4	65.2	65.3	67.8	65.	63.6	65.2	69.1	67.3	65.	61.6	60.9	64.3
23.....	60.6	61.4	61.3	62.	64.2	67.3	71.5	73.2	75.	69.	66.	62.7	66.
24.....	63.1	66.4	68.8	69.8	68.8	69.	71.	73.2	75.	75.3	75.	75.6	70.9
25.....	73.6	72.4	70.9	70.2	72.8	71.5	68.3	65.5	63.	66.3	66.3	65.	68.8
26.....	65.	66.	66.2	66.3	66.	66.4	67.4	68.6	68.7	68.	66.6	65.8	66.8
Means.....	65.	66.	66.2	66.3	66.	66.4	67.4	68.6	68.7	68.	66.6	65.8	66.8

Degrees Fahrenheit.

[1842.]

HORIZONTAL FORCE MAGNETOMETER.

MARCH.]

Göttingen time. Observatory time.	h. m. 6 02 0 21½	h. m. 8 02 2 21½	h. m. 10 02 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 02 10 21½	h. m. 18 02 12 21½	h. m. 20 02 14 21½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 02 20 21½	h. m. 4 02 22 21½	Means.	Reduced to 32° F.
Mar. 1.....	590.	584.5	578.9	564.5	560.	579.4	583.4	576.2	596.7	603.1	591.	596.9	583.7	489.7
2.....	573.5	586.6	580.	590.4	591.	589.9	603.7	610.2	602.9	602.	598.2	600.3	594.	494.9
3.....	605.6	584.4	583.1	582.8	584.9	599.	599.3	595.8	608.4	605.	607.	607.	596.8	489.3
4.....	612.7	599.4	596.	596.8	600.5	595.	606.	598.8	599.7	627.	611.	615.2	604.8	494.6
5.....	624.4	620.3	.....	613.5	609.5	609.5	608.1	591.7	624.5	608.6	618.6	615.1	615.8	517.8
7.....	566.8	569.4	569.1	565.9	562.9	568.5	566.1	579.1	567.1	561.2	556.7	565.4	566.7	488.
8.....	565.7	547.8	547.9	527.	538.4	548.9	543.5	537.	546.4	555.5	559.2	546.9	547.	471.7
9.....	543.5	536.1	545.7	552.6	554.6	568.5	567.6	554.8	546.4	565.3	568.	564.2	555.6	476.5
10.....	563.8	567.7	572.1	574.	585.1	594.4	596.5	581.1	583.8	589.4	589.6	589.5	562.2	486.5
11.....	566.7	582.8	573.3	565.3	565.7	571.	562.9	560.2	561.5	556.4	553.8	544.7	565.4	486.
12.....	550.1	518.3	524.2	522.3	527.5	543.5	531.7	518.3	520.3	527.5	533.3	539.7	529.7	459.8
14.....	544.3	534.9	533.1	535.2	540.8	552.3	567.8	543.5	534.3	541.9	546.6	558.	544.4	464.8
15.....	542.9	537.8	535.7	533.4	545.2	559.3	556.4	542.5	565.6	569.5	562.5	549.6	550.1	468.3
16.....	539.	528.7	524.1	520.1	517.9	544.7	548.	567.5	573.9	584.2	602.5	607.7	554.9	476.3
17.....	566.6	563.8	569.8	570.1	570.9	582.9	587.3	577.2	571.4	574.5	576.7	594.8	575.1	490.9
18.....	566.4	567.6	566.4	567.5	572.4	589.9	586.3	572.4	564.5	573.9	575.4	572.5	574.6	473.9
19.....	575.	575.6	572.7	561.	576.4	592.3	608.	611.2	608.	637.7	642.	636.6	598.9	501.7
21.....	606.2	575.1	570.8	564.4	567.	576.3	561.2	555.3	570.2	561.7	554.	554.7	568.1	488.7
22.....	583.6	559.5	556.8	558.7	566.9	584.7	590.	561.4	555.9	565.	665.	589.9	566.4	487.6
23.....	566.3	535.5	541.7	544.3	546.8	561.7	570.5	564.5	577.9	589.3	594.8	573.3	563.	486.6
24.....	559.4	566.6	576.5	556.3	576.4	583.4	589.2	563.8	570.2	583.7	575.1	562.5	572.1	489.8
25.....	558.6	569.4	570.	566.9	568.7	627.1	601.8	580.	575.8	579.9	576.	566.7	580.1	502.1
26.....	568.	569.1	573.9	577.5	575.3	594.6	596.5	566.5	597.2	569.	571.1	552.2	571.7	492.3
28.....	585.7	556.7	553.5	562.3	563.2	594.8	577.	559.1	561.5	559.3	560.7	552.5	565.8	486.2
29.....	548.8	540.1	538.7	542.2	546.9	582.9	577.2	580.5	567.	572.	575.9	577.8	582.5	479.3
30.....	578.8	566.5	561.4	571.5	592.2	594.4	524.1	605.6	599.1	600.	608.1	616.5	584.8	486.5
31.....	600.7	594.	580.9	575.6	577.1	595.8	603.2	578.	567.5	548.4	556.5	559.	577.2	486.8
Means.....	572.7	564.2	561.	561.6	567.6	581.4	578.8	570.6	572.5	578.2	578.8	577.9	572.1	
Reduced to 32° F.	490.1	480.2	476.8	476.	483.1	496.1	491.6	481.	481.2	486.9	491.3	492.6		485.5

[1842.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

Marsch.]

	h. m. 6 02 0 21½	h. m. 8 02 2 21½	h. m. 10 02 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 02 10 21½	h. m. 18 02 12 21½	h. m. 20 02 14 21½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 02 20 21½	h. m. 4 02 22 21½	Means.
Göttingen time.....													
Observatory time.....													
Mar. 1.....	67.	65.	64.8	63.6	66.2	66.1	66.1	67.	67.6	67.5	68.	68.1	66.8
2.....	66.1	64.2	64.4	70.	69.5	68.8	68.7	69.4	70.3	70.4	70.1	68.7	68.7
3.....	67.7	68.	69.3	70.7	72.2	71.4	71.4	72.4	74.	74.9	75.	74.3	71.8
4.....	73.1	72.2	71.7	71.3	71.8	72.4	72.5	73.3	74.4	75.2	...	73.4	72.8
5.....	71.8	71.	...	68.2	68.5	67.8	68.2	68.7	69.	68.3	66.	64.1	68.3
6.....	59.9	62.1	...	63.6	63.4	63.6	64.3	64.	64.	63.8	62.8	62.	63.
7.....	58.7	57.1	57.5	58.5	60.1	61.2	60.	61.4	62.	62.3	60.5	59.	59.9
8.....	59.8	62.1	62.5	63.	60.3	60.3	59.5	60.	61.8	62.7	61.9	61.6	61.3
9.....	64.1	65.6	65.	66.8	67.5	68.4	69.7	70.6	70.8	70.	68.2	67.	67.8
10.....	65.5	63.7	63.2	59.8	57.7	56.2	61.6	65.6	64.7	61.9	60.1	57.3	61.4
11.....	63.	59.8	59.5	59.	56.8	54.6	52.7	57.3	59.1	61.4	60.	56.4	57.9
12.....	53.	57.	58.	59.8	59.7	60.4	61.6	63.2	...	69.8	69.4	64.8	61.5
13.....	62.9	61.5	61.9	61.5	61.	61.7	64.	63.7	62.9	62.8	61.	58.2	62.3
14.....	59.5	60.6	60.6	59.7	60.4	61.9	62.8	63.4	63.5	62.9	61.3	60.3	61.1
15.....	61.1	61.5	60.	58.5	59.3	61.6	63.1	63.5	65.1	66.8	69.1	68.3	63.2
16.....	68.	67.7	68.5	70.5	69.3	69.3	69.8	70.5	70.5	70.3	69.2	68.3	69.3
17.....	67.1	66.	65.8	65.9	...	66.4	66.4	68.	70.8	71.	71.	70.4	68.
18.....	61.3	61.3	63.8	64.	62.5	61.	61.6	61.4	60.8	60.	59.	59.6	61.4
19.....	59.7	60.9	61.8	62.4	61.4	...	62.4	61.1	60.8	61.3	61.	60.	61.2
20.....	58.5	58.7	57.8	57.5	56.5	60.1	62.8	63.3	63.7	63.	60.3	61.3	60.3
21.....	62.3	62.9	63.4	63.5	61.8	61.7	63.5	63.9	64.8	62.6	60.	59.6	62.5
22.....	60.1	60.	60.3	61.7	59.8	58.	60.1	62.	61.7	62.7	61.6	62.3	60.9
23.....	63.2	64.2	63.	62.	61.6	63.4	61.5	61.6	63.1	60.3	57.2	56.1	61.4
24.....	54.2	62.	63.4	64.5	62.8	60.7	61.6	62.5	68.7	62.5	59.6	58.3	61.5
25.....	57.7	57.8	57.8	58.7	60.5	63.4	67.2	69.2	68.7	67.	64.3	61.1	62.8
26.....	60.7	63.6	65.7	67.	68.3	66.3	68.3	70.5	73.8	73.5	73.2	73.6	68.4
27.....	71.5	69.7	68.	...	70.1	68.	64.5	61.8	60.3	62.9	62.7	61.3	65.5
Means.....	62.6	63.1	63.2	63.7	63.3	63.6	64.3	65.2	65.8	65.8	64.4	63.6	64.1

Degrees Fahrenheit.

MARCH.]

TRIPLE OBSERVATIONS.

[1842.]

[97]

506

Göttingen time..... Observatory time.	Declination.			Vertical force.				Horizontal force.				Tempera- ture Fah- renheit.
	<i>h. m.</i> 13 54 8 13½	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 06 8 25½	<i>h. m.</i> 13 52 8 11½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 14 04 8 23½	Tempera- ture Fah- renheit.	<i>h. m.</i> 13 56 8 15½	<i>h. m.</i> 14 02 8 21½	<i>h. m.</i> 14 08 8 27½		
Mar. 1.....	573.7	570.6	568.7	683.7	685.2	687.	69.5	571.7	560.	562.2	66.2	
2.....	562.7	562.4	562.8	651.7	751.8	751.5	72.	592.1	591.	588.4	69.5	
3.....	571.8	572.7	572.5	765.2	767.	768.2	74.2	587.4	584.9	585.6	72.2	
4.....	568.	568.2	568.	768.	768.3	768.4	73.7	595.5	600.5	596.8	71.8	
5.....	572.	570.8	571.2	698.5	696.9	696.	68.2	609.4	609.5	605.8	68.5	
6.....	575.4	570.1	568.7	652.9	653.	652.9	66.	566.	562.9	568.2	63.4	
7.....	571.6	570.2	571.1	610.	611.	612.7	64.2	535.7	538.4	537.3	60.1	
8.....	575.2	572.9	573.5	633.9	630.6	628.7	62.5	558.7	554.6	554.2	60.3	
9.....	571.2	571.1	570.5	701.9	703.2	703.2	69.7	582.	585.1	585.7	67.5	
10.....	571.7	571.7	570.9	579.5	578.4	576.8	59.3	566.1	565.7	566.3	57.7	
11.....	571.5	571.6	570.	617.9	616.2	615.	62.	526.9	527.5	526.9	56.8	
12.....	573.	576.	573.3	623.1	623.	623.	62.8	538.1	540.8	536.1	59.7	
13.....	575.4	575.1	575.5	648.6	649.7	648.	64.	543.4	545.2	545.5	61.	
14.....	575.6	575.	577.5	635.2	635.4	635.6	63.7	516.4	517.9	517.9	60.4	
15.....	569.3	570.4	571.7	598.7	597.9	598.	61.4	571.2	570.9	570.	59.3	
16.....	574.3	570.8	573.1	759.5	758.5	758.4	72.	571.6	572.4	572.4	69.3	
17.....	561.5	562.5	564.2	692.5	691.4	690.9	66.8	577.5	576.4	573.5	.....
18.....	574.7	572.	570.	652.8	651.9	651.7	65.	576.4	567.	564.6	62.5	
19.....	568.	568.6	568.2	637.8	637.	637.	64.4	567.3	566.9	567.7	61.4	
20.....	576.	577.	577.	558.6	558.6	558.6	58.4	543.9	546.8	544.5	56.5	
21.....	573.5	572.9	573.5	657.7	655.2	655.5	64.5	572.9	576.4	573.8	61.8	
22.....	573.4	573.6	573.6	629.7	628.3	628.3	62.3	584.7	588.7	588.6	59.8	
23.....	570.1	570.8	570.6	638.5	638.6	638.6	64.5	573.8	575.3	574.4	61.6	
24.....	571.3	570.4	566.7	663.9	664.6	660.7	65.	571.2	563.2	563.4	62.8	
25.....	569.2	569.5	569.8	611.4	613.5	613.5	64.2	546.3	546.9	545.7	60.6	
26.....	560.1	563.9	563.5	707.6	707.7	707.2	69.8	593.5	592.2	593.9	66.3	
27.....	569.	570.4	571.8	799.6	731.1	732.6	72.8	573.6	577.1	579.	70.1	

[1842.

VERTICAL FORCE MAGNETOMETER.

APRIL.]

Göttingen time... Observatory time.	<i>h. m.</i> 5 58 0 17½	<i>h. m.</i> 7 58 2 17½	<i>h. m.</i> 9 58 4 17½	<i>h. m.</i> 11 58 6 17½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 15 58 10 17½	<i>h. m.</i> 17 58 12 17½	<i>h. m.</i> 19 58 14 17½	<i>h. m.</i> 21 58 16 17½	<i>h. m.</i> 23 58 18 17½	<i>h. m.</i> 1 58 20 17½	<i>h. m.</i> 3 58 22 17½	Means.	Reduced to 32° F.
April 1	628.6	564.8	634.3	684.	637.1	618.2	643.7	661.7	675.7	680.3	688.8	665.1	642.7	185.
2	665.1	620.4	606.7	599.1	585.	558.3	564.8	534.6	597.2	742.5	763.	755.5	649.3	184.9
4	644.	628.1	616.2	642.2	709.4	713.5	657.	.....	561.1	599.7	616.5	755.5	637.2	191.7
5	646.9	669.9	670.1	677.	678.5	687.1	669.8	665.8	694.7	699.1	888.	619.5	674.7	191.4
6	624.8	640.7	664.3	684.2	684.6	704.7	717.8	723.6	721.2	721.5	711.7	678.1	689.8	190.3
7	660.6	647.1	687.2	721.5	743.5	743.5	743.9	736.	739.9	760.5	774.	783.5	726.	187.3
8	772.4	778.	778.1	.....	752.	737.1	733.2	732.6	714.4	704.1	681.1	673.7	731.5	210.4
9	662.1	683.1	656.8	637.	601.7	614.4	616.2	625.6	641.3	659.4	637.1	594.7	635.8	195.7
11	547.	580.9	685.7	703.5	732.2	747.2	773.1	.....	783.5	768.7	755.5	722.5	731.4	188.7
12	705.7	667.5	687.5	702.5	698.2	706.6	716.6	728.	483.5	522.	599.4	656.4	591.1	201.
13	701.2	675.5	677.9	635.8	598.1	544.8	518.5	490.5	483.5	703.5	696.7	722.3	683.8	192.4
14	686.5	684.3	672.5	666.	668.5	676.	682.5	692.5	697.5	708.5	715.8	722.8	723.6	214.7
15	763.4	771.6	756.7	724.8	698.5	704.6	711.1	703.7	702.3	707.	700.	663.4	677.4	204.9
16	719.1	673.6	656.7	634.1	651.8	665.	681.	685.	691.6	707.	700.	663.4	677.4	195.6
18	462.4	557.2	601.	626.7	660.1	675.4	674.5	661.	634.4	657.9	648.5	639.6	624.9	195.6
19	635.4	639.5	653.6	658.	639.3	620.6	612.9	622.	635.2	640.1	660.5	679.2	641.3	198.5
20	699.5	701.4	713.4	711.5	705.3	717.1	737.2	744.8	750.9	751.8	750.2	750.4	727.8	195.6
21	707.	674.2	637.	606.3	651.2	701.2	710.	717.	716.5	723.5	619.	691.2	679.5	190.8
22	634.5	626.2	.....	586.8	567.4	567.	583.4	614.6	643.7	677.1	694.1	693.7	628.2	182.
23	696.3	682.4	673.7	663.	662.	667.	677.	.....	725.	735.2	734.2	708.5	693.1	193.6
25	617.1	611.7	671.9	741.	772.6	776.1	764.5	757.7	758.1	772.1	784.	784.2	734.2	179.4
26	778.5	766.5	755.2	738.9	730.2	734.1	774.	766.7	790.1	798.5	786.5	765.	765.3	197.
27	746.8	726.1	.....	872.9	638.7	623.8	618.8	615.	613.3	607.5	595.5	572.	639.	201.6
28	551.4	534.5	516.5	495.	483.8	488.8	512.1	584.	603.7	619.4	617.6	643.8	554.2	187.
29	683.1	693.9	705.	716.9	719.6	750.3	729.3	716.	697.6	888.2	877.	654.2	702.0	199.1
30	629.5	592.6	570.2	540.	528.8	540.	558.4	555.	610.9	618.	616.	603.1	580.2	186.
Means	663.9	657.4	664.5	656.	660.3	664.7	668.5	670.6	682.2	692.3	689.4	683.6	671.2	
Reduced to 32° F. 209.	195.7	195.7	198.8	195.7	191.9	192.2	185.2	171.1	177.3	187.4	202.1	207.1		193.

April.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

[1842.]

	<i>h. m.</i> 5 58 0 17½	<i>h. m.</i> 7 58 2 17½	<i>h. m.</i> 9 58 4 17½	<i>h. m.</i> 11 58 6 17½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 15 58 10 17½	<i>h. m.</i> 17 58 12 17½	<i>h. m.</i> 19 58 14 17½	<i>h. m.</i> 21 58 16 17½	<i>h. m.</i> 23 58 18 17½	<i>h. m.</i> 1 58 20 17½	<i>h. m.</i> 3 58 22 17½	Means.
Göttingen time.....													
Observatory time													
April 1.....	62.4	64.4	64.8	65.5	64.	64.	67.	68.	69.4	68.7	68.7	66.2	65.9
2.....	66.3	62.8	62.	62.2	60.	59.	63.8	68.2	73.	75.2	74.	71.7	66.4
4.....	64.8	63.6	62.7	69.1	71.5	67.	63.	61.1	61.1	63.3	63.8	66.	65.
5.....	67.2	67.3	68.	68.5	68.3	68.2	65.9	69.4	70.6	69.5	68.7	64.	67.8
6.....	63.2	67.1	68.8	68.2	69.9	70.8	71.8	72.	71.8	70.7	68.2	65.9	69.
7.....	64.2	69.	71.8	71.5	72.4	72.9	72.	72.	73.	74.6	75.5	74.5	71.9
8.....	73.5	75.4	73.5	....	71.3	70.6	71.	70.3	69.6	68.	66.8	66.7	70.6
9.....	66.8	69.2	68.5	62.5	62.8	63.	63.8	64.4	67.	68.	68.8	60.3	64.6
11.....	58.4	64.6	68.8	68.7	70.	71.	72.3	72.8	73.5	73.	71.7	69.7	69.5
12.....	67.3	66.1	70.8	71.5	72.	74.2	75.1	78.5	76.2	74.8	72.	68.3	72.2
13.....	67.	64.7	62.8	60.8	59.	57.1	55.7	54.8	55.5	60.	64.3	69.1	60.9
14.....	69.	68.2	66.8	67.3	67.8	68.2	69.	70.1	70.	70.	67.8	66.9	65.4
15.....	68.5	70.2	70.	69.	69.	70.5	71.	71.6	71.6	70.7	68.2	66.7	69.7
16.....	65.	62.5	63.4	65.	67.	67.6	68.9	69.8	71.2	70.6	67.1	65.4	67.
18.....	52.7	60.4	62.7	64.9	67.	67.2	66.4	65.4	66.	65.2	64.3	63.8	63.8
19.....	63.6	65.	65.7	64.7	62.8	61.9	63.6	64.3	65.	65.2	67.2	69.	64.8
20.....	69.5	70.2	70.3	69.1	69.5	72.1	74.1	74.4	73.7	73.6	71.7	69.6	71.5
21.....	67.2	65.1	62.5	62.4	69.4	71.	71.5	71.5	72.	71.3	67.9	66.3	68.2
22.....	64.2	63.	....	60.4	59.4	60.7	63.6	65.5	68.2	70.4	69.9	69.2	64.9
23.....	68.4	67.8	66.8	66.8	67.	68.2	69.8	....	73.	73.	70.3	68.	69.
25.....	63.1	64.3	71.9	75.4	75.9	74.8	74.2	74.2	75.4	76.3	76.	75.7	73.1
26.....	74.6	73.5	72.2	71.5	71.9	73.1	74.7	76.4	77.7	76.	74.2	73.	74.1
27.....	71.4	70.	....	65.5	64.	63.5	63.8	64.	63.5	62.7	60.8	59.5	64.4
28.....	58.3	56.5	55.3	53.9	53.5	54.6	58.2	64.1	63.	63.3	62.5	67.7	59.2
29.....	69.5	69.6	70.4	71.	72.2	71.	69.9	69.9	69.	67.5	66.	64.6	69.3
30.....	63.	61.1	57.9	57.3	57.4	58.	61.4	64.5	64.	64.2	63.3	62.	61.3
Means.....	65.7	66.3	66.5	66.1	66.7	67.	67.8	69.	69.4	69.4	68.1	67.3	67.4

Degrees Fahrenheit.

[1842.]

HORIZONTAL FORCE MAGNETOMETER.

APRIL.]

Gottingen time. Observatory time.	<i>h. m.</i> 6 02 0 21½	<i>h. m.</i> 8 02 2 21½	<i>h. m.</i> 10 02 4 21½	<i>h. m.</i> 12 02 6 21½	<i>h. m.</i> 14 02 8 21½	<i>h. m.</i> 16 02 10 21½	<i>h. m.</i> 18 02 12 21½	<i>h. m.</i> 20 02 14 21½	<i>h. m.</i> 22 02 16 21½	<i>h. m.</i> 0 02 18 21½	<i>h. m.</i> 2 02 20 21½	<i>h. m.</i> 4 02 22 21½	Means.	Reduced to 32°F.
April 1.....	543.5	544.5	539.	542.1	571.8	555.	573.4	572.4	567.	570.4	567.7	575.	560.3	478.5
2.....	566.1	568.8	565.1	562.1	579.2	599.4	594.4	591.6	587.5	605.4	601.	607.1	584.	496.8
4.....	579.	597.2	592.6	578.8	594.6	620.3	633.3	594.9	565.8	572.2	562.1	572.7	590.3	509.3
5.....	559.5	562.5	573.6	575.	574.4	597.	592.6	588.5	592.	586.2	601.	603.5	582.1	492.5
6.....	567.4	561.4	583.4	589.1	567.3	601.9	605.2	596.1	600.5	612.3	613.2	603.1	596.7	501.4
7.....	535.3	570.5	584.8	583.1	592.4	623.9	635.9	609.3	604.	617.	614.	616.	602.2	500.
8.....	596.3	601.7	604.1	.....	608.8	610.8	611.6	607.2	612.5	612.3	616.6	602.1	607.2	510.3
9.....	576.9	580.4	582.5	582.9	573.9	610.5	607.3	583.5	565.4	589.7	592.2	592.5	586.5	506.6
11.....	648.	610.2	601.8	614.6	632.1	641.5	644.	612.9	602.9	683.	633.4	644.2	629.	531.5
12.....	633.4	611.6	606.8	617.8	602.	644.6	635.5	613.8	628.8	711.9	703.7	638.5	639.	536.3
13.....	015.5	661.	669.4	623.9	664.8	611.3	607.2	590.5	572.3	607.	595.9	591.6	618.	644.6
14.....	599.5	599.6	599.3	598.7	602.	614.7	623.4	606.8	594.6	611.7	596.5	651.2	608.2	515.9
15.....	748.6	641.8	653.7	611.3	637.6	687.2	641.7	612.5	619.6	636.7	632.9	642.	648.8	531.1
16.....	708.5	715.6	675.	628.	630.	642.7	640.2	611.6	599.5	615.7	624.4	614.7	642.2	552.6
18.....	584.8	553.5	570.5	576.4	592.4	619.5	613.7	610.4	579.2	582.2	584.5	590.8	586.5	507.9
19.....	583.8	586.4	.....	591.8	611.4	617.5	606.6	603.8	618.4	597.2	607.5	610.6	600.5	519.
20.....	603.2	602.9	605.1	604.3	606.6	622.2	621.7	617.8	618.5	645.5	641.2	657.7	620.8	520.1
21.....	640.5	625.7	607.7	628.4	605.	670.8	641.3	634.8	624.9	632.7	635.6	625.7	631.1	536.9
22.....	615.2	612.4	605.7	628.4	603.9	609.9	596.	604.7	614.3	618.8	619.	618.5	609.4	523.
23.....	621.	630.6	626.2	613.	628.	639.5	654.2	623.	637.8	634.1	631.3	632.3	630.9	531.8
25.....	606.1	591.3	594.5	599.4	636.3	660.5	648.6	628.7	623.	632.	631.1	636.6	624.	516.3
26.....	635.4	635.1	621.	613.4	624.3	640.2	643.	626.6	629.4	638.7	631.3	626.	631.2	519.4
27.....	614.3	604.7	.....	594.2	603.1	601.9	599.3	592.3	576.1	593.7	592.3	583.	595.9	511.7
28.....	576.1	574.2	576.1	572.3	575.7	581.7	580.9	545.2	551.	569.7	563.5	564.8	567.6	488.2
29.....	578.6	572.4	568.2	571.6	565.1	606.5	605.8	593.2	601.5	603.	597.	597.9	590.	496.5
30.....	593.6	592.3	584.9	581.	585.5	599.4	586.8	580.4	578.8	579.	597.1	600.6	588.3	511.1
Means.....	606.5	600.7	599.6	594.2	604.3	620.4	616.	600.8	598.9	613.	612.5	611.5	606.7	
Reduced to 32°F.	520.1	514.	512.7	507.8	515.5	531.5	525.8	508.2	502.8	516.3	518.3	520.5		516.

[1842.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

April.]

Göttingen time..... Observatory time.....	h. m. 0 21½	h. m. 2 21½	h. m. 4 21½	h. m. 6 21½	h. m. 8 21½	h. m. 10 21½	h. m. 12 21½	h. m. 14 21½	h. m. 16 21½	h. m. 18 21½	h. m. 20 21½	h. m. 22 21½	h. m. 24 21½	h. m. 26 21½	h. m. 28 21½	h. m. 30 21½	Means.
April 1.....	59.7	60.3	61.	61.7	62.	60.	62.5	63.3	65.	65.2	63.8	63.3	63.3	63.3	62.3	62.3	
2.....	62.	60.5	60.	60.3	58.3	57.3	59.8	65.5	71.6	73.	72.8	70.7	70.7	70.7	64.3	64.3	
4.....	64.2	62.8	61.9	61.9	68.3	64.5	60.9	57.3	58.4	60.7	61.	61.8	61.8	61.8	62.	62.	
5.....	63.9	64.1	64.7	65.8	65.5	65.5	63.2	66.	67.8	67.9	65.2	62.6	62.6	62.6	65.2	65.2	
6.....	61.6	64.5	66.2	66.4	68.	68.5	69.3	69.8	70.1	70.1	67.5	65.2	65.2	65.2	67.3	67.3	
7.....	63.2	66.8	69.	69.7	69.8	70.4	69.8	70.1	71.4	72.8	73.7	72.3	72.3	72.3	69.9	69.9	
8.....	70.8	72.4	71.	.....	68.5	67.8	68.1	67.5	67.1	65.9	64.3	64.	64.	64.	67.9	67.9	
9.....	63.8	65.8	61.5	59.8	68.9	69.3	60.4	60.8	63.3	63.4	60.7	58.5	58.5	58.5	61.4	61.4	
11.....	57.8	62.4	66.8	67.2	68.9	69.3	70.4	70.8	71.7	72.4	71.	68.8	68.8	68.8	68.1	68.1	
12.....	66.3	64.6	68.5	67.8	69.7	71.7	72.4	74.2	76.4	74.5	71.	68.3	68.3	68.3	70.4	70.4	
13.....	66.	63.7	61.7	59.5	57.1	55.5	54.2	53.2	53.7	57.8	61.7	65.9	65.9	65.9	59.3	59.3	
14.....	66.3	65.8	64.5	65.4	65.7	65.2	65.9	67.2	68.	68.8	66.3	65.2	65.2	65.2	66.2	66.2	
15.....	66.5	68.	67.7	67.7	68.	68.6	69.	69.8	70.	69.5	67.5	65.6	65.6	65.6	68.2	68.2	
16.....	63.7	61.	62.4	63.8	64.7	64.7	66.9	67.3	69.1	69.3	66.	64.1	64.1	64.1	65.2	65.2	
18.....	51.2	57.2	59.8	61.8	63.7	63.5	63.3	62.7	63.	63.	62.5	61.2	61.2	61.2	61.1	61.1	
19.....	61.	61.9	.....	62.4	60.1	59.6	60.7	61.6	62.8	63.	65.	66.4	66.4	66.4	62.2	62.2	
20.....	66.8	67.4	69.	66.7	67.7	69.4	71.	71.	71.5	72.7	71.	68.5	68.5	68.5	69.3	69.3	
21.....	66.1	63.9	61.5	60.	67.5	69.1	69.5	70.	70.6	70.7	68.7	65.5	65.5	65.5	66.9	66.9	
22.....	63.4	62.	60.4	58.5	59.7	60.2	62.4	64.8	67.9	70.1	69.9	69.3	69.3	69.3	64.	64.	
23.....	63.1	67.2	66.3	65.8	67.1	67.5	69.	70.5	72.2	72.8	70.2	67.8	67.8	67.8	68.7	68.7	
25.....	62.6	63.2	69.4	73.	73.6	72.7	72.6	73.1	74.8	76.6	76.	75.3	75.3	75.3	71.9	71.9	
26.....	74.	72.7	71.3	70.7	72.	72.7	73.9	75.5	77.	75.8	73.7	71.9	71.9	71.9	73.4	73.4	
27.....	70.4	68.8	.....	64.5	63.5	62.3	62.	62.	62.	63.	60.	58.	58.	58.	63.2	63.2	
28.....	56.4	54.7	53.5	52.8	53.7	53.5	55.8	61.4	62.	62.	61.4	61.7	61.7	61.7	57.7	57.7	
29.....	66.3	66.5	67.	68.1	68.8	68.6	68.4	67.8	67.3	66.3	64.8	63.3	63.3	63.3	67.	67.	
30.....	61.5	59.7	57.5	56.3	57.3	58.	59.8	61.8	63.6	68.	63.	61.6	61.6	61.6	60.6	60.6	
Means.....	64.	64.1	64.2	64.	64.9	64.9	65.4	66.3	67.6	68.2	66.9	65.7	65.7	65.7	65.5	65.5	

Degrees Fahrenheit.

APRIL.]

TRIPLE OBSERVATIONS.

[1842.]

[97]

512

	Declination.				Vertical force.				Horizontal force.			
	<i>h. m.</i> 13 54 8 13½	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 06 8 25½		<i>h. m.</i> 13 52 8 11½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 14 04 8 23½	Tempera- ture Fah- renheit.	<i>h. m.</i> 13 56 8 15½	<i>h. m.</i> 14 02 8 21½	<i>h. m.</i> 14 08 8 27½	Tempera- ture Fah- renheit.
Göttingen time.												
Observatory time.												
April 1	577.7	573.8	571.5		637.	637.1	634.1	64.	579.	571.8	575.9	62.
2	567.	567.6	568.		586.1	585.	583.1	60.	578.1	579.2	579.2	58.3
4	568.6	568.8	569.7		707.6	709.4	710.5	71.5	593.9	594.6	597.2	66.3
5	572.9	571.6	571.2		680.8	678.5	679.	68.3	578.5	574.4	575.2	65.5
6	566.8	566.8	566.8		684.7	684.6	686.	69.9	599.5	587.3	589.4	68.
7	568.	568.1	568.4		723.5	724.5	725.4	72.4	588.8	592.4	591.7	69.8
8	574.2	574.	575.8		748.4	752.	746.4	71.3	602.9	603.8	603.2	68.5
9	572.9	572.3	572.		602.5	601.7	602.	62.8	578.9	573.9	574.7	58.8
11	574.5	572.7	571.3		697.7	698.2	698.5	70.	636.	632.1	631.8	68.9
12	547.2	553.	554.6		732.6	732.2	732.5	72.	606.4	602.	599.3	69.7
13	555.4	553.	556.1		591.5	588.1	584.7	59.	666.5	664.8	659.1	57.1
14	572.7	572.	572.		668.	668.5	669.5	67.8	603.2	602.	599.8	65.7
15	583.1	584.2	578.8		700.9	698.5	698.	69.	642.2	637.6	641.	68.
16	575.7	574.	574.5		649.9	651.8	652.	67.	629.2	630.	630.2	64.7
18	569.	568.2	568.6		658.5	660.1	661.5	67.	586.4	592.4	587.6	63.7
19	563.5	563.6	564.3		642.1	639.3	638.4	62.8	608.5	611.4	615.1	60.1
20	562.1	561.8	561.8		706.	705.3	705.3	69.5	604.7	606.5	609.3	67.7
21	569.7	569.2	569.4		644.7	651.2	655.	69.4	604.3	605.	607.9	67.5
22	569.	569.2	569.		568.	567.4	566.3	59.4	603.5	603.9	604.3	59.7
23	568.2	568.	568.5		662.7	662.	662.2	67.	625.1	628.	627.8	67.1
25	571.7	570.9	571.5		771.6	772.6	773.7	75.9	634.4	636.3	641.	73.6
26	570.5	570.6	569.2		730.	730.2	730.5	71.9	632.8	634.3	638.5	72.
27	567.7	566.6	567.1		640.2	638.7	637.6	64.	603.3	603.1	602.9	68.5
28	571.	571.9	572.3		484.2	483.8	483.9	53.6	575.9	575.7	576.8	53.7
29	571.7	571.6	573.2		719.6	719.6	719.9	57.	583.2	585.1	589.8	66.6
30	571.5	570.9	570.1		528.9	528.8	528.7	57.4	582.9	586.5	584.1	57.3

Mar.]

DECLINATION MAGNETOMETER.

[1842.]

Göttingen time. Observatory time	h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		Means.
	6 00	8 00	h. m.	h. m.	10 00	12 00	h. m.	h. m.	14 00	16 00	h. m.	h. m.	18 00	20 00	h. m.	h. m.	22 00	0 00	2 00	4 00	
May 2	563.9	566.9	.....	.....	569.7	570.6	.....	.....	566.6	562.1	552.	552.	554.8	556.6	552.	552.	550.	562.8	561.2	561.2	558.7
3	563.6	565.2	567.9	571.7	567.9	571.7	567.6	567.6	567.7	567.6	567.7	567.6	567.6	567.7	567.6	567.7	567.6	567.7	567.6	567.7	563.2
4	564.7	568.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	563.6
5	563.9	566.4	568.	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	560.9
6	566.5	568.	568.	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	561.7
7	561.	562.9	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	561.7
8	562.9	565.8	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	563.3
9	563.7	566.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	563.3
10	564.1	567.2	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	560.4
11	562.2	565.4	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	561.8
12	561.	562.9	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	564.3
13	562.9	565.8	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	560.5
14	563.7	566.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	562.4
15	564.1	567.2	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	561.8
16	562.2	565.4	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	560.5
17	561.	562.9	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	562.4
18	562.9	565.8	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	560.5
19	563.7	566.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	562.4
20	564.1	567.2	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	560.5
21	562.2	565.4	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	562.4
22	561.	562.9	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	560.5
23	562.9	565.8	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	562.4
24	563.7	566.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	560.5
25	564.1	567.2	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	562.4
26	562.2	565.4	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	560.5
27	561.	562.9	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	565.4	565.	562.4
28	562.9	565.8	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	560.5
29	563.7	566.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	569.7	571.7	562.4
30	564.1	567.2	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	570.3	573.3	560.5
31	562.2	565.4	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	568.6	570.	562.4
Means	562.9	563.9	565.6	567.2	569.5	570.3	570.3	569.7	569.5	569.7	569.5	569.7	569.5	569.7	569.5	569.7	569.5	569.7	569.5	569.7	561.8

[1842.]

HORIZONTAL FORCE MAGNETOMETER.

MAR.]

Göttingen time. Observatory time.	h. m. 6 02 0 21½	h. m. 8 02 2 21½	h. m. 10 02 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 02 10 21½	h. m. 18 02 12 21½	h. m. 20 02 14 21½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 02 20 21½	h. m. 4 02 22 21½	Means.	Reduced to 32° F.
May 2	582.1	582.4	584.6	585.1	587.1	589.7	592.7	597.1	598.8	571.2	573.6	579.7	579.7	515.7
3	580.5	575.7	571.2	565.1	602.1	604.7	607.4	580.5	585.3	594.3	595.5	590.2	581.6	498.7
4	589.3	592.3	588.5	579.1	604.5	600.0	593.8	580.5	578.1	603.5	593.9	592.1	586.6	490.4
5	586.6	582.0	586.0	583.2	594.9	605.6	615.6	593.8	591.5	604.2	607.0	615.5	597.0	495.9
6	611.3	621.6	601.9	605.4	594.1	601.6	606.5	592.4	620.5	614.6	615.0	603.9	603.9	519.4
7	.....	.....	.....	.....	579.1	571.1	537.2	546.6	557.1	586.5	584.2	600.1	600.1	518.4
8	.....	.....	.....	.....	588.9	601.9	609.4	590.1	603.0	620.2	611.7	624.7	599.0	485.5
9	.....	.....	.....	.....	620.4	639.8	632.7	617.4	620.0	634.0	641.8	636.7	627.1	511.4
10	611.4	620.7	623.9	622.1	629.9	634.0	619.1	587.9	597.8	607.0	607.7	610.0	617.8	528.4
11	643.8	630.7	623.9	622.1	629.9	634.0	619.1	587.9	597.8	607.0	607.7	610.0	617.8	528.4
12	610.6	615.3	588.8	.....	613.3	628.6	632.0	634.8	626.2	632.3	634.5	621.3	620.7	525.5
13	610.7	597.3	579.0	572.7	592.9	609.7	582.0	589.5	590.7	604.0	608.3	610.6	595.6	504.3
14	.....	.....	.....	572.7	592.9	609.7	582.0	589.5	590.7	604.0	608.3	610.6	595.6	504.3
15	553.6	558.8	564.4	597.6	621.6	664.5	631.6	628.2	631.1	639.7	638.8	603.0	620.2	531.5
16	633.8	618.6	618.8	625.2	642.4	655.1	650.1	630.3	648.8	656.5	672.5	646.7	640.7	533.8
17	.....	.....	.....	625.2	642.4	655.1	650.1	630.3	648.8	656.5	672.5	646.7	640.7	533.8
18	656.9	645.8	642.7	651.1	675.2	660.3	676.1	657.4	659.4	673.7	670.0	660.4	647.7	551.5
19	673.2	666.1	654.7	633.2	643.9	634.9	606.5	592.9	600.3	592.7	593.5	614.6	625.6	566.9
20	627.2	623.8	629.2	630.7	649.0	668.5	652.7	639.2	642.0	650.5	644.4	639.4	641.4	549.6
21	615.1	617.6	628.6	642.2	674.0	667.1	651.0	641.9	639.2	652.5	648.3	646.3	643.6	540.9
22	637.0	632.0	616.3	615.5	646.8	684.6	673.8	655.9	641.9	648.5	641.4	629.0	643.6	541.4
23	630.5	629.0	640.9	638.7	666.0	667.0	657.7	651.7	634.8	632.5	662.3	646.5	646.5	542.2
24	650.6	651.7	654.0	641.1	661.5	701.4	670.5	650.2	651.8	668.6	658.2	660.6	660.0	546.4
25	651.8	649.1	642.0	652.7	662.0	684.6	670.5	650.2	651.8	668.6	658.2	660.6	660.0	546.4
26	646.3	644.0	641.7	622.4	641.7	663.7	664.2	659.2	643.2	669.5	660.3	667.7	652.9	546.0
27	670.6	662.5	655.5	649.0	658.6	671.4	671.4	667.9	662.5	664.0	666.7	663.0	662.4	553.5
28	663.2	649.0	642.5	623.0	636.5	647.4	642.7	637.8	625.7	641.7	648.1	650.2	641.5	547.4
29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	624.0	619.5	614.4	614.6	630.7	639.5	629.7	616.9	619.6	629.7	630.7	630.7	625.1	.....
Reduced to 32° F.	592.5	529.3	525.0	524.4	538.9	546.9	535.3	519.4	520.0	528.8	532.4	535.3	.....	530.7

[1842.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

MAR.]

	h. m. 6 02 0 21½	h. m. 8 02 2 21½	h. m. 10 02 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 02 10 21½	h. m. 18 02 12 21½	h. m. 20 02 14 21½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 02 20 21½	h. m. 4 02 22 21½	Means.
Göttingen time.....													
Observatory time.....													
May 2.....	56.8	60.4	64.1	66.9	67.9	57.	57.	56.8	56.6	56.7	56.3	56.2	56.6
3.....	59.5	60.8	63.9	66.	67.9	66.2	66.2	65.8	66.	65.	63.	60.8	63.9
4.....	74.3	72.4	71.	71.	72.6	69.4	69.4	73.	73.	73.2	74.	75.9	69.
5.....	65.2	62.9	60.8	59.6	60.5	61.8	61.8	65.7	68.	69.8	70.6	68.	70.9
6.....	66.7	65.5	63.7	62.	62.2	61.7	61.8	62.6	61.1	64.7	63.7	62.	64.5
7.....					54.7	54.7	60.		67.9	70.5	71.2	69.8	64.
9.....									67.2	67.8	67.3	66.5	65.7
10.....		65.1	64.7	64.3	62.8	64.3	65.8	66.7	67.2	67.8	75.1	73.5	66.7
11.....	65.7	64.7	63.8	63.5	64.8	65.7	68.5	70.8	73.5	75.	75.1	73.5	68.7
12.....	71.9	69.7	67.7	65.5	65.	64.3	64.7	66.2	66.2	67.	65.6	65.	66.4
13.....	63.6	62.1	61.		67.	69.7	71.7	72.7	73.2	73.1	71.8	69.	68.6
14.....	65.7	63.8	65.	67.8	68.7	67.7	68.8	67.	68.7	69.8	69.1	66.	67.1
16.....	54.7	56.9	61.7	64.2	66.3	66.5	68.2	70.	71.2	72.2	71.5	70.	66.1
17.....	68.3	67.6	65.	63.8	72.5	74.7	76.5	77.7	78.3	78.2	75.9	73.3	73.1
18.....	71.1	68.9	67.	65.	65.4	66.7	68.5	70.2	71.3	72.2	71.4	70.6	69.
19.....	69.2	67.8	66.7	66.2	67.6	68.4	70.6	72.6	74.5	75.2	74.8	73.5	70.6
20.....	71.5	68.5	64.9	61.7	59.3	56.7	54.7	53.1	52.2	51.8	52.1	58.4	58.4
21.....	62.9	64.2	65.	65.4	63.6	70.	70.6	70.9	70.9	70.2	68.2	66.1	67.3
23.....	60.8	64.6	68.6	73.2	76.4	76.2	74.7	73.8	74.	74.	72.5	69.4	71.5
24.....	67.9	66.3	64.1	66.5	74.8	76.4	77.1	76.3	74.5	73.5	70.4	69.	71.3
25.....	67.6	69.8	72.2	72.5	72.9	72.3	72.2	73.	74.6	74.2	71.8	72.	72.1
26.....	76.3	76.7	75.5	72.5	74.5	75.5	76.5	77.4	77.6	77.	75.6	74.2	75.7
27.....	72.3	70.7	69.5	67.8	67.2	67.	67.2	67.9	70.	71.8	72.	71.7	69.6
28.....	70.7	69.9	68.7	68.8	71.8	73.9	73.4	74.7	76.8	77.8	76.8	75.	73.1
30.....	72.2	71.6	70.5	70.	70.6	74.3	76.2	76.6	77.4	77.	75.8	74.	73.9
31.....	72.1	70.	68.	66.7	66.	66.4	66.4	67.2	69.1	71.	....	68.4	68.2
Means.....	67.2	66.7	66.4	66.7	67.3	67.6	68.3	69.5	70.3	70.8	69.8	68.7	68.3

Correction for temperature, 2.6 divisions of the scale for one degree Fahrenheit.

Göttingen time.....	h. m. 6 00	h. m. 8 00	h. m. 10 00	h. m. 12 00	h. m. 14 00	h. m. 16 00	h. m. 18 00	h. m. 20 00	h. m. 22 00	h. m. 0 00	h. m. 2 00	h. m. 4 00	Means. 22 19½
Observatory time.....	h. m. 0 19½	h. m. 2 19½	h. m. 4 19½	h. m. 6 19½	h. m. 8 19½	h. m. 10 19½	h. m. 12 19½	h. m. 14 19½	h. m. 16 19½	h. m. 18 19½	h. m. 20 19½	h. m. 22 19½	
June 1	564.5	565.5	566.6	575.6	573.4	561.9	555.	552.4	555.2	561.	559.5	564.	562.9
2	567.3	570.3	571.1	574.8	576.3	566.1	548.5	547.	556.	564.2	571.1	564.3	562.8
3	563.	566.	568.7	.....	574.7	560.1	552.5	553.	558.1	566.2	562.6	562.9	561.6
4	563.6	564.8	563.4	576.6	576.	570.	566.7	532.5	573.1.	553.1	566.7	557.	563.5
5	560.5	566.1	.....	575.	572.6	558.4	549.	549.6	558.3	559.	566.	562.6	560.9
6	560.4	566.	565.4	572.1	571.2	557.4	514.1	550.	555.7	557.8	557.6	560.	559.
7	564.5	568.3	567.8	566.7	567.1	550.2	543.7	548.5	550.	553.9	558.6	565.5	558.6
8	563.2	561.	564.6	572.1	570.1	570.5	559.	550.8	548.3	559.1	562.	560.1	562.3
9	561.2	562.	564.4	579.2	584.6	574.8	556.6	548.9	554.	561.2	562.6	563.3	564.4
10	562.6	561.7	563.	576.2	577.9	569.	554.1	552.3	556.8	560.3	566.8	562.9	564.6
11	573.1	569	574.	577.8	569.6	561.	546.3	563.9	557.5	566.7	571.5	571.2	565.9
12	562.4	560.9	562.	563.9	572.6	569.	555.4	552.5	568.4	560.	563.	564.8	562.9
13	564.	574.	573.8	572.6	571.4	566.2	559.2	553.6	560.	559.2	566.4	560.3	565.5
14	565.6	563.	565.	572.5	571.4	566.2	559.2	553.6	562.8	561.	561.	562.	562.2
15	567.	565.	568.3	562.6	571.6	569.2	556.9	556.4	561.	563.4	563.5	563.3	564.2
16	563.	566.6	569.5	573.9	571.8	565.3	556.2	556.8	562.3	560.4	563.	568.7	564.6
17	563.7	563.5	566.9	570.	573.9	562.7	555.6	563.	560.2	563.7	564.1	564.1	563.4
18	562.9	564.2	566.	569.8	574.1	569.2	556.2	554.1	559.1	563.	563.	563.	563.7
19	564.	566.	567.8	573.2	574.4	564.	556.2	550.1	558.6	557.	562.8	570.2	563.7
20	569.3	565.5	557.8	578.1	570.9	565.	560.	551.3	558.3	563.8	561.4	564.2	565.4
21	564.7	543.6	566.3	562.3	566.	559.3	555.3	555.4	559.8	562.2	562.4	567.7	559.7
22	569.	566.8	567.8	569.8	580.6	572.	555.1	556.6	558.4	561.4	575.	576.8	567.3
23	570.	566.5	569.2	573.6	575.3	566.	554.4	554.1	558.5	564.5	564.	564.8	565.1
24	566.9	563.4	566.5	573.4	577.5	569.	554.	554.5	560.8	563.7	563.3	563.8	564.7
25	566.1	562.8	566.	571.5	576.1	568.	558.	553.4	566.	561.5	563.5	563.5	564.1
26	571.	569.6	567.	574.7	572.7	566.3	551.8	550.	556.5	563.4	563.1	575.5	565.
27	563.	563.	567.1	572.4	573.5	564.7	554.3	552.1	558.6	561.5	564.1	564.9	563.4
28	565.5	563.	567.1	572.4	573.5	564.7	554.3	552.1	558.6	561.5	564.1	564.9	563.4
29	565.5	563.	567.1	572.4	573.5	564.7	554.3	552.1	558.6	561.5	564.1	564.9	563.4
30	565.5	563.	567.1	572.4	573.5	564.7	554.3	552.1	558.6	561.5	564.1	564.9	563.4
Means	565.5	563.	567.1	572.4	573.5	564.7	554.3	552.1	558.6	561.5	564.1	564.9	563.4

[1842.]

VERTICAL FORCE MAGNETOMETER.

June.]

Göttingen time. Observatory time.	<i>h. m.</i> 5 58 0 17½	<i>h. m.</i> 7 58 2 17½	<i>h. m.</i> 9 58 4 17½	<i>h. m.</i> 11 58 6 17½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 15 58 10 17½	<i>h. m.</i> 17 58 12 17½	<i>h. m.</i> 19 58 14 17½	<i>h. m.</i> 21 58 16 17½	<i>h. m.</i> 23 58 18 17½	<i>h. m.</i> 1 58 20 17½	<i>h. m.</i> 3 58 22 17½	Means.	Reduced to 32° F.
June 1.....	679.	651.8	624.8	588.2	591.7	602.2	619.4	636.2	659.1	689.	706.9	700.	645.7	175.9
2.....	690.3	669.8	638.	610.5	610.	617.	634.	659.	689.1	723.5	724.7	704.5	664.2	182.3
3.....	676.9	658.7	629.7	598.	598.	613.1	631.	650.6	671.2	692.	703.1	691.3	655.9	179.4
4.....	691.7	668.6	632.6	642.5	634.9	642.6	650.7	660.	660.	648.	659.	701.5	657.5	175.6
5.....	662.6	657.7	624.8	598.	598.	612.7	630.5	648.5	669.	699.7	709.5	701.5	657.5	185.7
6.....	673.3	678.	640.5	604.8	595.	580.5	588.6	603.	625.5	637.7	638.	623.4	627.4	180.6
7.....	676.5	680.6	648.3	608.9	544.	544.	574.3	597.2	612.	619.4	623.4	623.3	591.7	181.3
8.....	617.6	611.3	611.	607.9	608.9	621.	637.5	657.	686.2	709.	724.8	726.3	652.4	170.5
9.....	730.2	726.9	724.9	718.9	713.6	716.9	726.7	742.	769.5	789.	794.3	774.3	743.9	179.6
10.....	750.7	711.1	676.1	637.1	599.7	581.2	571.5	573.	581.	600.5	612.4	592.6	623.1	185.7
11.....	610.3	601.9	567.8	573.9	572.8	597.1	630.9	662.	681.7	695.5	660.3	667.5	626.7	162.3
12.....	682.	724.7	708.6	703.3	692.7	689.2	686.2	690.3	697.5	715.	722.7	722.9	703.1	180.7
13.....	738.5	718.4	711.8	708.4	699.	703.3	719.5	740.8	751.1	755.4	750.7	747.9	728.7	184.7
14.....	741.	736.2	754.7	728.7	725.2	733.9	753.6	784.	807.3	816.	814.	810.2	767.1	182.6
15.....	703.	798.9	791.8	785.7	775.8	776.	773.	775.	776.	783.	791.5	772.3	782.7	191.4
16.....	767.4	764.7	757.7	754.3	751.5	758.	770.	798.	810.	816.8	815.	807.6	780.9	181.5
17.....	801.6	786.4	771.6	764.9	753.3	750.9	749.	748.	757.7	762.	765.1	771.5	761.2	183.7
18.....	751.8	744.4	754.	719.6	715.	724.	732.	747.	770.	752.7	794.1	771.5	751.6	179.2
19.....	761.	752.2	741.6	732.	726.	737.2	757.3	783.	805.6	831.7	837.4	831.8	774.6	164.4
20.....	818.9	801.	794.8	777.6	773.	789.	801.3	803.	798.	795.5	784.5	764.3	791.7	186.9
21.....	759.2	743.9	726.5	721.1	706.9	696.	706.	718.5	730.9	752.	768.4	731.4	729.1	181.
22.....	723.4	711.	707.5	704.6	693.	704.	724.5	740.5	753.	762.	762.2	755.3	728.9	171.4
23.....	822.1	787.2	733.5	735.5	741.8	754.	779.	799.	712.4	806.5	795.5	783.1	770.8	168.7
24.....	771.5	756.6	739.2	735.	713.6	741.	720.5	741.	764.4	786.9	798.1	797.8	752.3	175.9
25.....	793.4	773.7	764.7	754.9	751.	768.3	790.	805.7	821.5	840.	849.3	840.6	795.	179.4
26.....	805.9	793.5	769.6	759.	758.	779.8	811.	840.5	868.	892.	875.6	863.3	816.8	181.1
Means.....	735.9	719.5	702.4	693.	682.6	688.6	702.4	718.4	730.8	748.3	750.4	742.7	718.	
Reduced to 32° F.	198.6	197.1	194.8	189.5	180.4	172.8	163.7	160.9	153.	169.1	184.7	193.8		178.7

[1949.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

June.]

Göttingen time.....	A. m. 5 58	A. m. 7 58	A. m. 9 58	A. m. 11 58	A. m. 13 58	A. m. 15 58	A. m. 17 58	A. m. 19 58	A. m. 21 58	A. m. 23 58	A. m. 1 58	A. m. 3 58	Means.
Observatory time.....	0 17½	2 17½	4 17½	6 17½	8 17½	10 17½	12 17½	14 17½	16 17½	18 17½	20 17½	22 17½	
June 1.....	67.	65.2	63.3	62.2	62.7	64.2	66.1	68.1	70.6	73.	71.	70.	66.8
2.....	68.2	66.4	64.4	63.4	63.4	65.1	67.4	69.6	73.7	72.3	70.9	69.3	67.7
3.....	67.	65.7	63.5	62.5	62.8	64.8	67.	69.5	73.7	71.3	70.	69.1	67.3
4.....	68.	66.9	65.9	65.4	65.2	65.9	67.4	69.1	73.7	71.3	69.8	69.9	67.7
5.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
6.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
7.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
8.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
9.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
10.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
11.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
12.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
13.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
14.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
15.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
16.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
17.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
18.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
19.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
20.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
21.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
22.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
23.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
24.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
25.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
26.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
27.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
28.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
29.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
30.....	69.5	67.5	66.5	65.5	65.4	66.5	68.7	71.4	74.8	73.2	74.	72.2	73.
Means.....	71.9	70.7	69.6	69.3	69.2	70.2	71.9	73.3	74.8	74.9	73.9	73.4	71.9

Degrees Fahrenheit.

[1842.]

HORIZONTAL FORCE MAGNETOMETER.

[June.]

Gottingen time... Observatory time	A. m. 8 02 0 21½	A. m. 8 02 2 21½	A. m. 10 02 4 21½	A. m. 12 02 6 21½	A. m. 14 02 8 21½	A. m. 16 02 10 21½	A. m. 18 02 12 21½	A. m. 20 02 14 21½	A. m. 22 02 16 21½	A. m. 24 02 18 21½	A. m. 26 02 20 21½	A. m. 28 02 22 21½	Mean.	Reduced to 33° F.
June 1.....	643.2	638.1	641.9	612.2	630.8	636.	651.1	642.7	648.4	645.9	645.5	648.4	639.9	650.5
2.....	662.7	636.4	642.7	630.4	635.	633.4	635.4	640.2	649.3	650.1	649.2	653.3	644.8	653.5
3.....	642.2	641.7	639.4	632.	646.	671.7	661.4	664.4	637.3	648.5	649.5	650.3	649.7	650.3
4.....	645.	640.3	634.7	630.2	638.7	646.5	614.3	715.2	633.9	643.5	715.8	708.3	652.1	661.1
5.....	636.5	635.9	.....	630.2	635.	705.5	687.1	669.8	636.	639.2	678.1	684.6	681.7	677.1
6.....	630.3	638.8	635.8	641.6	647.9	630.2	643.3	628.2	626.5	655.	644.7	641.9	649.5	666.6
7.....	626.3	642.4	636.5	625.8	636.9	639.5	624.6	616.4	628.4	639.8	652.3	650.9	635.	658.6
8.....	644.	635.9	640.	631.5	639.5	646.4	654.2	652.5	658.4	669.8	684.7	665.5	635.	661.9
9.....	660.3	660.1	652.2	635.8	635.3	676.2	668.8	604.7	635.	670.9	675.1	666.1	637.5	649.9
10.....	656.5	656.2	644.8	627.2	638.7	658.3	649.	620.8	619.2	624.4	625.3	628.9	637.3	657.2
11.....	652.2	641.1	663.	617.	661.5	647.7	627.3	624.	644.3	670.	686.6	676.2	645.9	656.7
12.....	666.7	652.	662.3	664.3	650.8	668.7	697.6	691.3	648.8	672.	663.7	677.2	671.3	672.
13.....	674.8	673.1	671.8	668.2	660.5	668.	665.7	660.3	664.2	676.3	663.7	650.8	668.1	664.9
14.....	675.1	674.9	664.7	669.	669.4	691.	672.2	658.5	671.2	684.	685.3	683.9	673.7	662.2
15.....	677.5	675.	676.	673.8	664.1	681.4	679.2	666.	659.	667.5	666.6	669.6	672.7	660.1
16.....	673.5	669.9	675.8	658.	670.	677.	673.2	654.8	654.	676.2	680.	670.	668.9	654.8
17.....	702.8	690.	691.8	683.7	683.8	699.2	671.8	660.2	665.9	684.6	686.	682.5	681.9	671.7
18.....	680.9	675.3	667.	656.8	670.1	686.2	665.7	661.7	664.2	672.5	676.6	668.6	670.5	661.6
19.....	665.1	680.9	659.7	659.3	669.1	686.9	686.7	655.5	648.3	662.9	654.3	674.1	665.8	651.9
20.....	647.4	674.9	680.3	671.3	684.9	686.1	690.8	701.4	680.4	686.2	672.6	665.4	676.8	662.4
21.....	645.7	694.9	664.9	658.7	681.6	695.6	670.6	666.	687.1	671.5	678.5	673.	673.3	669.1
22.....	664.9	682.	687.9	654.9	659.1	675.1	675.2	670.	677.5	679.0	662.8	642.5	665.1	658.8
23.....	689.6	687.	671.9	668.	674.6	696.3	695.3	666.	679.1	681.9	679.2	678.	679.1	664.7
24.....	676.	669.8	668.7	659.2	660.1	681.7	682.5	652.5	676.2	685.	683.8	685.5	664.7	656.
25.....	670.5	678.5	671.	665.	659.4	692.1	685.8	671.1	685.9	689.1	688.5	692.	678.3	660.5
26.....	670.5	689.1	671.1	664.	662.7	714.7	695.6	680.	693.8	703.5	698.5	758.4	693.4	670.4
Mean.....	664.6	665.7	657.2	648.6	660.8	673.7	665.5	665.7	656.1	669.6	671.	670.9	663.5	
Reduced to 33° F.	562.7	566.9	561.5	564.1	565.6	576.6	564.4	560.4	546.4	556.2	561.8	563.6		561.3

[1942.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER

June.]

	h. m. 6 02 0 21½	h. m. 8 02 2 21½	h. m. 10 02 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 02 10 21½	h. m. 18 02 12 21½	h. m. 20 02 14 21½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 02 20 21½	h. m. 4 02 22 21½	Means.
Göttingen time.....													
Observatory time.....													
June 1.....	66.5	64.4	62.6	61.7	62.5	63.8	65.3	67.3	70.	72.2	71.4	69.8	66.4
2.....	67.7	65.5	63.5	62.2	63.2	64.7	66.3	68.8	71.3	72.2	70.7	68.7	67.1
3.....	65.9	64.7	61.4	61.7	63.4	64.	66.2	67.9	70.4	71.8	70.5	68.9	66.4
4.....	67.6	66.	64.8	64.7	64.4	65.	66.3	68.1	69.2	69.3	69.5	69.5	67.
5.....	68.2	65.3	62.7	61.5	61.6	61.5	62.1	63.7	65.8	66.2	65.2	63.4	63.9
6.....	61.2	59.7	58.	57.7	57.7	59.	61.3	63.8	65.1	65.2	65.	64.2	61.4
7.....	63.5	63.	63.3	63.5	63.7	64.6	66.1	68.6	71.2	73.3	73.5	73.	67.3
8.....	72.5	72.	71.5	70.7	70.4	71.5	73.2	74.8	76.8	78.	76.3	73.3	73.4
9.....	70.2	67.3	65.4	63.3	60.4	59.	59.9	59.5	61.7	63.9	63.3	61.3	62.8
10.....	62.8	61.9	61.1	60.5	61.7	63.9	66.5	69.2	71.8	72.8	73.3	71.7	66.3
11.....	70.8	69.9	69.5	68.5	68.4	68.7	69.5	70.3	71.4	72.	71.8	71.3	70.2
12.....	70.7	70.3	69.5	69.3	69.4	70.7	72.6	74.	74.5	74.	73.	72.8	71.7
13.....	72.3	71.9	71.5	71.4	71.8	73.5	75.7	77.5	78.8	78.5	78.1	77.6	74.9
14.....	76.3	76.1	75.5	74.7	74.5	74.5	75.	75.3	75.5	75.6	75.4	74.9	75.3
15.....	74.2	74.	73.7	73.2	73.5	74.6	76.4	78.1	79.	79.	79.	77.5	75.9
16.....	76.5	75.7	74.6	73.8	73.	73.	73.	73.4	75.	75.2	75.	74.4	74.4
17.....	73.3	72.2	71.5	71.	71.8	72.2	73.4	75.	77.4	78.	76.8	75.	73.9
18.....	74.2	73.1	72.4	71.6	71.9	73.7	76.7	77.4	80.1	81.6	80.2	78.1	75.8
19.....	76.7	75.7	75.	75.5	75.7	76.3	77.1	77.5	77.8	76.9	75.	73.3	76.
20.....	72.	71.	70.	69.3	69.	69.1	70.8	72.5	74.7	76.2	74.7	71.6	71.7
21.....	71.4	71.	70.7	70.5	70.5	72.	73.7	75.	76.	76.2	74.8	74.	72.9
22.....	78.1	75.1	72.7	73.5	74.	75.3	77.3	78.6	78.5	77.1	76.5	75.4	76.
23.....	74.	73.7	71.5	70.7	70.4	71.	73.	74.9	....	78.6	78.4	76.7	73.8
24.....	75.2	74.8	73.5	73.6	75.	75.9	77.3	78.7	80.7	82.5	78.9	77.3	77.3
25.....	76.9	74.9	74.	73.6	75.2	77.1	80.5	81.9	84.5	84.4	83.8	81.	79.3
Means.....	71.1	69.9	68.8	68.6	68.6	69.4	70.9	72.5	74.1	74.8	74.	72.6	71.3

Degrees Fahrenheit.

[1943.]

TRIPLE OBSERVATIONS.

June.]

	Declination.			Vertical force.			Horizontal force.			Temperature Fah- renheit.
	h. m. 13 54 8 13½	h. m. 14 00 8 19½	h. m. 14 06 8 25½	h. m. 13 52 8 11½	h. m. 13 58 8 17½	h. m. 14 04 8 23½	h. m. 13 56 8 15½	h. m. 14 02 8 21½	h. m. 14 08 8 27½	
Göttingen time.....	573.8	573.4	572.3	591.4	591.7	592.6	630.3	630.8	630.	62.5
Observatory time.....	577.	576.3	576.	610.	610.	610.1	648.3	648.3	651.7	63.2
	576.5	574.7	574.	598.	598.	598.	653.3	656.	657.	63.4
	576.	576.	575.2	634.	634.9	634.8	637.6	639.7	642.	64.4
	573.2	572.6	572.6	716.3	715.	715.	694.7	695.	695.6	70.4
	570.8	571.2	570.7	585.4	585.	585.	648.	647.9	644.8	61.6
	568.2	567.1	566.7	538.	537.6	538.9	635.	636.9	640.	57.7
	578.2	570.1	571.2	610.1	608.9	609.4	639.7	639.5	637.7	63.7
	566.1	564.6	561.9	714.5	713.6	713.4	638.	635.3	634.2	70.4
	577.5	577.9	577.5	602.7	599.7	598.5	636.7	636.7	636.9	60.4
	573.3	569.6	568.1	572.	572.8	572.7	665.	661.5	659.2	61.7
	572.1	572.6	573.	693.3	692.7	691.3	648.9	650.8	653.9	68.4
	571.1	571.4	572.	699.3	699.	698.9	659.5	660.5	661.2	69.4
	570.	569.2	570.	725.	725.2	725.1	671.4	669.4	671.	71.8
	571.7	571.6	571.8	776.8	775.8	776.4	691.7	694.1	694.	74.5
	571.9	571.8	572.	752.	751.5	751.6	670.4	670.	669.7	73.5
	574.8	573.9	573.	754.7	753.9	752.6	682.2	683.8	682.3	73.
	573.1	574.1	574.6	715.	715.	715.	669.	670.1	670.9	71.8
	574.3	574.4	574.6	736.2	736.	735.8	667.3	669.1	671.	71.9
	570.4	570.9	571.2	772.7	773.	773.	683.8	684.9	680.5	75.7
	566.5	566.6	566.7	704.	706.9	706.7	687.	681.6	683.5	69.
	560.7	560.6	578.8	700.	699.	698.8	666.1	659.1	657.9	70.5
	573.5	575.3	575.1	740.7	741.8	741.9	674.9	674.6	675.3	74.
	577.6	577.5	578.	713.6	713.6	713.	660.1	660.1	662.1	70.4
	576.4	576.1	576.8	751.	751.	751.2	659.7	659.4	661.5	75.
	571.2	572.7	575.5	757.	758.	759.5	679.2	682.7	682.	75.9

MAGNETIC OBSERVATORY,

AT THE

SIRARD COLLEGE, PHILADELPHIA.

ORDINARY MAGNETIC AND TRIPLE OBSERVATIONS,

FROM JULY TO DECEMBER, 1842.

GENERAL NOTES.

The instruments during this half year were as in June, 1842.

The correction for temperature of the vertical force remains the same; that of the horizontal force magnetometer is from 2.6 to 2.5 divisions for one degree Fahrenheit.

[1942.]

DECLINATION MAGNETOMETER.

JULY.]

	<i>h. m.</i> 6 00	<i>h. m.</i> 8 00	<i>h. m.</i> 10 00	<i>h. m.</i> 12 00	<i>h. m.</i> 14 00	<i>h. m.</i> 16 00	<i>h. m.</i> 18 00	<i>h. m.</i> 20 00	<i>h. m.</i> 22 00	<i>h. m.</i> 0 00	<i>h. m.</i> 2 00	<i>h. m.</i> 4 00	Means.
Göttingen time.....	0 19½	2 19½	4 19½	6 19½	8 19½	10 19½	12 19½	14 19½	16 19½	18 19½	20 19½	22 19½	
Observatory time.....													
July 1.....	576.1	568.3	566.	573.8	577.2	575.5	552.8	543.8	553.3	560.4	563.8	564.6	564.6
2.....	597.8	568.4	570.5	579.2	593.7	567.7	545.	563.5	550.2	587.7	575.4	576.9	573.9
3.....	608.3	570.5	572.3	577.3	569.4	564.5	568.	556.7	560.8	563.	571.5	568.7	569.2
4.....	565.7	555.6	563.5	576.	.....	569.8	559.4	556.2	558.4	562.	564.5	571.	563.8
5.....	570.8	558.3	564.8	575.4	.....	561.8	553.9	549.3	557.	566.	568.1	562.	560.7
6.....	565.1	570.3	567.	575.5	571.2	566.4	556.2	551.8	557.	561.6	563.	563.1	564.
7.....	563.7	565.	566.5	573.2	577.	565.3	557.5	551.	557.	561.3	563.2	568.3	567.4
8.....	560.3	572.4	568.7	.....	566.	568.5	558.2	548.9	555.8	564.2	563.4	572.1	567.9
9.....	563.9	553.6	566.4	565.3	575.6	564.	551.6	555.9	558.8	563.1	573.2	568.6	563.3
10.....	565.1	559.	562.9	572.5	575.6	568.	559.5	548.	558.3	565.1	565.6	569.3	564.1
11.....	564.7	563.	565.	574.2	574.5	566.1	558.6	553.7	556.9	569.	562.1	564.7	563.5
12.....	565.3	564.7	563.4	574.	574.3	566.4	555.2	552.6	557.5	561.2	564.2	565.6	563.6
13.....	560.5	566.5	574.6	563.6	576.6	565.6	556.1	552.9	559.1	562.	562.1	565.	565.4
14.....	572.	566.1	569.2	567.	573.5	562.8	556.	557.8	559.	561.4	563.	566.	564.5
15.....	566.9	564.3	568.5	576.6	575.8	566.	554.4	558.1	562.5	563.	564.1	577.	566.6
16.....	563.3	566.1	569.1	576.	568.2	561.	564.	557.7	559.	561.7	561.8	572.	564.8
17.....	567.5	565.5	573.7	573.8	572.5	566.2	557.4	567.2	559.5	563.7	567.1	564.	566.1
18.....	561.1	563.4	567.7	573.7	576.3	567.	557.8	556.1	563.1	564.9	564.	564.1	564.9
19.....	563.3	566.3	567.7	560.7	577.	559.8	547.6	552.	560.	563.5	562.	565.4	563.8
20.....	566.9	577.9	578.	576.6	576.9	566.1	556.8	553.9	565.7	563.4	576.6	569.6	569.2
21.....	566.9	563.1	567.2	572.9	583.8	574.7	557.4	555.5	564.9	565.2	563.3	570.6	567.1
22.....	567.3	566.7	573.8	560.8	581.2	566.1	551.8	543.	565.4	560.1	563.7	566.9	564.6
23.....	564.5	560.7	566.8	568.2	582.1	565.2	554.3	561.5	557.2	565.4	563.6	566.6	563.8
24.....	567.	568.5	575.8	578.3	578.3	572.	559.5	553.4	555.9	568.3	563.8	568.8	567.4
25.....	569.5	570.	560.6	567.4	589.1	580.7	569.5	562.6	563.6	567.	566.5	567.8	571.1
26.....	571.	568.8	571.6	577.8	580.1	569.3	564.6	555.9	559.	563.6	575.1	570.	568.8
27.....													
28.....													
29.....													
30.....													
Means.....	569.8	565.6	569.2	575.9	576.8	566.7	556.3	553.4	558.2	563.4	568.4	568.3	565.9

VERTICAL FORCE MAGNETOMETER.

JULY.]

[1842.]

Getting time... Observatory time	h. m. 5 58 0 17½	h. m. 7 58 2 17½	h. m. 9 58 4 17½	h. m. 11 58 6 17½	h. m. 13 58 8 17½	h. m. 15 58 10 17½	h. m. 17 58 12 17½	h. m. 19 58 14 17½	h. m. 21 58 16 17½	h. m. 23 58 18 17½	h. m. 1 58 20 17½	h. m. 3 58 22 17½	Means.	Reduced to 32° F.
July 1.....	848.7	823.	804.	794.5	803.8	825.7	881.3	904.5	929.2	948.2	.....	911.	861.1	179.4
2.....	933.7	934.7	939.4	877.7	841.5	840.8	841.	811.	816.	839.8	839.6	838.7	862.	189.7
3.....	917.8	883.2	822.7	808.7	788.7	774.4	.....	803.	814.	832.5	832.5	833.3	826.2	196.4
4.....	818.5	807.2	800.8	790.5	780.1	783.1	789.	802.2	821.8	832.	839.4	820.8	806.4	171.9
5.....	811.7	808.9	782.8	762.5	761.	768.4	765.	769.5	770.	766.9	770.7	759.1	773.9	178.6
6.....	766.4	761.6	727.5	714.	703.5	699.3	693.	707.5	746.5	765.2	771.9	747.2	731.5	172.6
7.....	730.5	715.7	706.	705.	706.	713.3	727.8	734.1	755.4	782.8	785.8	798.6	738.4	163.8
8.....	799.5	793.1	790.1	.....	774.	779.5	780.9	787.6	791.4	785.	786.7	777.5	785.9	171.7
9.....	723.5	713.9	704.7	706.5	698.5	705.	724.5	752.3	762.9	773.1	776.8	755.1	732.	166.
10.....	733.6	721.4	713.8	705.1	696.9	698.4	710.9	731.4	754.	783.1	800.9	785.5	736.2	163.8
11.....	786.1	759.4	733.2	726.	723.1	743.7	767.2	803.	820.2	845.	855.	856.2	784.7	165.
12.....	838.7	813.6	797.9	793.3	791.9	805.8	825.6	851.	871.1	871.	867.	856.5	831.9	177.3
13.....	836.7	784.7	761.9	756.7	748.2	741.	734.	722.4	715.4	711.	703.	690.2	742.1	183.2
14.....	896.1	677.	672.5	667.2	663.	660.9	655.7	651.1	648.	655.	658.	659.	662.8	170.1
15.....	785.9	749.1	737.8	723.8	731.7	743.3	763.2	779.	828.1	865.	871.	857.	786.7	164.4
16.....	835.8	797.5	776.6	763.1	766.7	776.1	800.	833.	857.	879.6	890.	874.	819.1	172.4
17.....	856.9	843.2	827.1	812.4	800.	803.	811.	836.8	843.	857.1	846.5	809.9	828.9	184.9
18.....	775.	740.3	711.2	698.6	689.6	696.8	718.	730.6	756.5	780.9	790.	780.2	739.	172.
19.....	768.5	744.1	731.5	708.8	713.	718.4	733.8	754.	773.1	789.	806.2	794.3	752.9	169.7
20.....	781.6	777.7	766.	747.6	750.	761.3	761.4	802.9	820.4	854.2	862.7	798.2	798.2	170.5
21.....	828.4	779.5	767.8	757.	754.5	755.7	764.	778.	787.3	797.6	792.	776.7	778.2	180.2
22.....	757.4	732.8	727.1	706.3	708.7	717.4	737.	775.	798.3	828.2	837.1	824.2	762.5	169.8
23.....	811.7	781.1	765.3	750.6	752.2	766.5	794.3	823.3	860.	.....	.....	.....	789.8	170.1
24.....	862.6	842.1	842.1	852.7	854.2	860.	875.3	874.9	959.5	950.2	939.2	911.7	889.3	212.
25.....	891.4	876.	860.8	868.6	860.1	860.8	870.	890.8	911.1	943.	949.7	939.1	893.4	217.1
26.....	913.9	883.	826.5	832.7	878.5	897.4	937.4	949.8	952.3	966.	972.	960.5	914.3	208.3
Means.....	808.2	790.5	778.	761.1	759.3	765.2	779.7	794.2	813.9	828.	826.	819.2	792.9	
Reduced to 32° F.	200.7	199.2	191.2	184.7	178.8	169.9	160.	155.7	156.5	169.2	186.1	191.5		178.4

July.]

THEMOMETER OF VERTICAL FORCE MAGNETOMETER.

[1842.]

	h. m. 5 56	h. m. 7 58	h. m. 9 58	h. m. 11 58	h. m. 13 58	h. m. 15 58	h. m. 17 58	h. m. 19 58	h. m. 21 58	h. m. 23 58	h. m. 1 58	h. m. 3 58	Means.
Göttingen time.....	5 56	7 58	9 58	11 58	13 58	15 58	17 58	19 58	21 58	23 58	1 58	3 58	
Observatory time.....	6 17½	8 17½	10 17½	12 17½	14 17½	16 17½	18 17½	20 17½	22 17½	24 17½	26 17½	28 17½	
2 July 1.....	80.	78.5	77.3	77.5	79.2	80.9	84.3	87.	89.	89.1	89.5	89.5	82.5
2.....	83.5	82.3	81.	80.3	80.6	82.	83.	84.5	83.2	81.9	80.5	79.3	81.8
3.....	78.6	77.2	76.4	75.8	76.1	77.3	77.3	80.6	81.9	81.5	80.8	80.	78.8
4.....	79.	78.3	77.6	77.	77.2	77.6	79.	80.5	81.2	81.	80.	79.2	79.
5.....	78.	76.4	75.	75.7	75.8	76.	75.2	80.6	76.8	76.9	76.	75.	76.1
6.....	74.2	73.7	72.5	70.2	70.5	70.5	72.1	74.4	77.	76.7	75.5	74.	73.4
7.....	72.8	72.1	71.7	71.8	72.	73.	74.6	76.	78.	78.5	77.	77.8	74.6
8.....	77.3	77.1	76.8	76.7	76.7	76.8	78.3	79.	78.7	77.8	77.3	77.	77.5
9.....	72.5	71.9	71.	71.2	71.7	73.	75.4	76.3	77.2	77.6	75.9	74.2	74.
10.....	72.8	72.3	71.8	71.2	71.	71.8	74.	75.7	78.	79.6	78.3	76.8	74.4
11.....	76.	74.7	73.8	73.	73.5	75.8	79.	80.	81.8	83.1	82.4	81.2	77.9
12.....	79.8	78.2	77.3	77.6	78.5	80.	81.7	83.2	83.5	83.	82.5	81.	80.5
13.....	79.	75.8	75.	74.5	74.	73.6	73.	72.5	72.	71.	70.5	70.3	73.4
14.....	69.8	68.4	68.9	68.3	68.2	68.	68.	68.	68.1	68.5	68.8	69.1	68.5
15.....	75.8	74.1	73.5	73.3	74.2	76.	78.5	80.4	83.	84.	83.2	81.8	78.1
16.....	78.3	77.1	76.4	76.1	76.3	77.3	80.3	82.1	84.3	84.8	83.5	82.8	79.9
17.....	81.	79.5	78.	77.4	77.4	78.1	80.7	82.	82.3	82.5	80.	77.2	79.7
18.....	74.5	72.4	70.4	70.	70.	71.8	73.7	76.	77.3	78.2	77.4	76.	74.
19.....	74.5	73.5	72.4	72.4	71.5	73.	75.	76.6	78.7	79.7	78.7	77.1	75.2
20.....	76.1	74.8	74.6	74.2	74.6	76.6	78.7	80.1	83.8	83.8	83.3	82.	78.5
21.....	77.9	76.3	75.	74.8	74.3	75.4	76.7	77.4	78.3	78.	75.3	75.3	76.3
22.....	73.4	72.	71.3	70.5	71.5	73.8	76.4	78.7	81.	82.	80.5	79.4	75.9
23.....	78.	75.6	74.4	74.5	75.3	77.3	80.1	82.1	84.3	85.7	84.3	82.	77.9
24.....	80.	80.	79.3	79.	79.	80.	82.	84.2	87.7	88.6	85.7	84.4	82.1
25.....	80.7	80.	79.8	79.3	78.8	79.5	81.4	83.	85.8	86.8	85.7	84.4	82.1
26.....	81.	80.8	81.5	83.3	81.2	83.6	85.6	86.	87.5	88.1	86.8	85.8	84.3
27.....	77.	75.8	75.1	74.7	75.	76.1	77.9	79.3	80.7	80.8	79.4	78.5	77.5
Means.....	77.	75.8	75.1	74.7	75.	76.1	77.9	79.3	80.7	80.8	79.4	78.5	77.5

Degrees Fahrenheit.

[1842.]

HORIZONTAL FORCE MAGNETOMETER.

JULY.]

Göttingen time. Observatory time.	h. m. 6 02 0 21½	h. m. 8 02 2 21½	h. m. 10 02 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 02 10 21½	h. m. 18 02 12 21½	h. m. 20 02 14 21½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 02 20 21½	h. m. 4 02 22 21½	Means.	Reduced to 32° F.
July 1.....	719.7	700.6	695.9	697.1	699.6	699.1	704.	688.6	690.	707.5	.....	705.8	700.7	570.4
2.....	563.4	717.1	741.7	766.	721.2	736.8	772.3	657.7	656.9	724.	754.2	750.3	713.5	585.8
4.....	.....	827.7	718.4	761.1	754.4	832.9	.....	761.3	731.	723.5	739.9	743.8	762.3	643.7
5.....	747.4	741.7	733.6	723.3	740.6	749.	742.	729.4	716.	722.7	726.2	744.9	734.6	613.7
6.....	738.5	712.6	707.8	699.3	727.8	747.	711.1	692.1	675.	762.6	743.6	718.	713.7	601.1
7.....	710.3	704.4	699.1	686.	696.3	718.2	716.6	706.7	696.2	697.5	705.1	698.5	703.1	596.3
8.....	691.5	689.6	684.4	680.7	695.1	722.8	719.7	709.	681.6	701.5	709.7	727.	701.	592.1
9.....	736.9	680.	666.	.....	714.2	727.1	728.8	736.3	713.	708.1	701.7	733.3	712.3	595.6
11.....	697.8	673.3	680.3	701.9	713.9	734.4	730.	698.6	680.9	691.8	711.2	704.4	700.7	597.
12.....	686.3	691.8	687.4	691.8	704.6	715.1	725.3	708.5	675.3	698.6	718.3	720.7	702.	593.3
13.....	701.5	697.6	679.4	687.6	703.4	739.7	710.3	692.2	700.	726.2	722.2	728.3	707.4	586.8
14.....	717.8	713.7	704.7	681.4	709.	739.8	728.7	711.4	703.	721.7	717.5	728.2	714.7	589.1
15.....	721.7	706.2	702.8	694.4	703.9	722.3	702.	687.4	663.2	684.	678.3	670.9	693.1	588.1
16.....	691.3	676.4	671.5	687.1	697.	696.	669.7	662.2	666.	676.	677.1	678.1	676.4	583.5
18.....	706.	691.7	681.7	688.7	690.8	697.4	702.4	695.3	696.7.	714.	708.9	745.2	701.6	582.3
19.....	717.7	713.2	702.2	689.9	707.	714.9	714.6	701.7	722.	728.5	717.2	710.2	711.4	587.6
20.....	713.4	713.5	711.2	707.9	728.4	724.	696.	693.6	723.5	728.7	722.2	713.	714.6	592.4
21.....	697.2	692.7	681.7	672.6	693.	707.6	706.9	685.2	683.3	707.1	703.7	701.5	694.8	588.2
22.....	690.6	685.5	681.	671.5	726.1	709.	708.4	687.7	695.5	712.7	698.5	694.1	696.5	585.7
23.....	691.6	713.1	702.8	691.2	724.2	725.4	726.5	709.3	710.	740.2	732.	745.	717.6	587.7
25.....	736.	710.6	706.5	696.	714.3	733.1	739.7	709.3	694.7	697.3	706.4	707.5	712.6	599.8
26.....	701.1	694.6	690.9	681.9	693.	734.7	720.1	699.4	699.2	713.7	719.6	715.9	705.3	592.7
27.....	714.3	702.8	694.6	696.5	707.4	713.	726.5	721.	721.	724.5	725.5	721.	713.2	591.5
28.....	716.5	702.2	701.	704.9	728.7	723.3	712.7	705.6	716.7	720.5	741.5	725.3	718.6	589.7
29.....	712.5	717.	698.4	701.3	704.2	722.7	724.3	732.7	745.2	724.7	743.5	739.	723.1	593.7
30.....	728.9	719.8	714.8	713.8	739.2	745.8	723.2	741.	736.8	743.	725.5	740.	730.1	597.
Means.....	704.8	707.3	697.7	699.	712.2	728.1	718.4	704.	699.6	713.3	717.9	719.6	710.2	
Reduced to 32° F.	588.8	596.	589.5	590.6	602.2	616.3	601.7	583.4	574.8	587.2	594.7	599.7		593.6

July.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

[1842.

Göttingen time.....	h. m. 6 02 0 21½	h. m. 8 02 2 21½	h. m. 10 03 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 02 10 21½	h. m. 18 02 12 21½	h. m. 20 02 14 21½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 03 20 21½	h. m. 4 02 22 21½	Means.
July 1.....	79.5	78.2	76.7	77.5	78.9	80.9	83.7	86.5	88.3	88.6	....	84.8	82.1
2.....	83.	81.7	80.3	79.7	80.	....	82.	83.3	82.5	81.3	80.	78.7	81.1
4.....	78.2	76.5	75.9	75.1	75.3	71.5	....	79.3	80.5	81.	79.5	79.5	77.6
6.....	78.8	77.7	77.	76.3	....	77.	78.	79.1	80.1	80.7	79.5	78.7	78.5
6.....	77.4	75.2	75.	74.8	75.2	75.	74.8	75.	75.8	76.	75.6	74.3	75.3
7.....	73.2	72.8	71.8	70.5	69.5	69.7	70.6	72.	74.3	75.5	76.	73.4	72.3
8.....	72.1	71.2	71.1	71.	71.4	72.	73.7	74.3	76.6	78.3	78.	77.5	73.9
9.....	77.2	76.8	76.	....	76.3	76.2	77.1	77.9	78.	77.2	77.	76.5	76.9
11.....	71.8	70.9	59.3	69.7	71.3	72.5	74.5	76.8	76.8	77.	75.7	73.5	71.9
12.....	72.3	71.6	70.7	70.	70.	71.	73.2	74.8	77.5	79.6	78.7	76.4	73.8
13.....	75.7	74.	73.1	72.2	73.2	75.6	....	80.	82.	84.1	83.	81.	77.6
14.....	79.2	77.8	76.7	77.	78.6	79.8	81.5	83.2	83.5	83.	82.2	80.7	80.3
15.....	78.2	74.9	74.2	73.5	73.8	73.2	71.6	71.1	70.7	70.1	69.8	69.2	72.4
16.....	68.8	68.3	67.5	67.3	67.3	67.	67.	67.4	67.7	69.	68.3	68.5	67.8
18.....	75.8	73.8	73.3	72.6	73.9	75.6	78.	80.4	83.3	84.1	83.6	81.2	77.9
19.....	78.4	76.4	75.6	74.8	75.6	76.8	80.	82.	84.5	84.8	83.8	82.5	79.6
20.....	81.2	79.5	77.2	76.4	76.7	77.4	79.3	80.7	81.9	82.	79.4	76.8	79.
21.....	73.3	71.	69.	68.7	69.6	71.	72.5	74.2	76.2	77.8	77.3	76.2	73.
22.....	73.8	72.5	71.3	70.3	71.6	73.8	74.5	76.1	78.3	78.8	79.	76.4	74.6
23.....	75.5	74.1	73.8	73.5	74.1	76.	78.	79.8	82.7	84.2	83.5	81.8	78.1
25.....	77.4	74.8	74.2	73.7	73.3	74.4	75.3	76.2	77.	77.5	76.2	74.3	75.4
26.....	72.5	71.	69.7	69.5	71.4	73.6	75.8	78.1	80.5	82.	80.7	79.	75.3
27.....	77.3	74.7	73.6	73.7	75.3	77.	79.8	81.9	84.2	83.5	82.6	81.8	78.8
28.....	80.5	79.	78.4	78.2	77.8	79.3	81.	82.5	84.	84.5	83.5	80.8	80.8
29.....	79.8	78.5	78.6	78.6	78.4	78.4	80.4	82.3	85.5	86.5	85.6	83.5	81.4
30.....	82.	80.	79.	78.7	80.5	82.1	84.	86.	87.	87.7	86.8	85.3	83.2
Means.....	76.6	75.2	73.6	73.7	74.3	75.	76.9	78.4	80.	80.5	79.4	78.1	76.8

Göttingen time..... Observatory time.....	Declination.			Vertical force.			Tempera- ture Fah- renheit.	Horizontal force.			Tempera- ture Fah- renheit.
	<i>h. m.</i> 13 54 8 13½	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 06 8 25½	<i>h. m.</i> 13 52 8 11½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 14 04 8 23½		<i>h. m.</i> 13 56 8 15½	<i>h. m.</i> 14 02 8 21½	<i>h. m.</i> 14 08 8 27½	
July 1	576.8	577.2	577.2	803.	803.8	804.7	79.2	699.9	699.6	700.2	78.9
2	593.6	593.7	598.2	841.9	841.5	841.6	80.6	730.8	721.2	718.5	80.
4	565.7	569.5	577.5	792.	788.8	790.1	76.1	847.	854.4	815.	76.3
5	576.1	577.2	575.3	781.	780.1	780.	77.2	739.	740.6	742.4	.....
6	572.2	572.4	570.2	760.4	761.	760.8	75.8	723.7	727.8	728.3	75.2
7	572.4	571.2	572.8	704.4	703.5	703.5	70.5	697.	696.5	697.7	69.5
8	577.	577.	576.9	705.6	706.	706.	72.	693.	695.1	696.6	71.4
9	564.7	565.	564.4	775.	774.	774.	76.7	712.	714.2	718.2	76.3
11	578.	575.6	575.	699.3	698.5	698.1	71.7	708.9	713.9	712.5	71.3
12	575.5	575.6	575.	697.	696.9	696.6	71.	703.9	704.6	703.	70.
13	574.8	574.5	574.2	723.1	723.1	723.7	73.5	700.6	703.4	706.2	73.2
14	574.1	574.3	573.3	731.8	731.9	732.2	78.5	707.	709.	712.4	78.6
15	576.2	576.6	576.9	748.7	748.2	747.8	74.	703.1	703.9	703.3	73.8
16	573.5	573.5	573.6	664.	663.	662.9	68.2	684.1	687.	688.6	67.3
18	575.9	575.8	575.	731.	731.7	731.7	74.2	690.7	690.8	687.4	73.9
19	569.3	568.2	569.7	765.	766.7	767.	76.3	705.4	707.	706.9	75.6
20	573.1	573.5	571.5	801.7	800.	800.1	77.4	723.4	728.4	725.	76.7
21	575.9	576.3	576.9	689.4	689.6	690.	70.	692.7	693.	693.7	69.6
22	577.6	577.	575.9	713.	713.	712.5	71.5	722.2	726.1	724.9	71.6
23	575.2	576.9	578.6	750.1	750.	749.4	74.6	723.5	724.2	723.5	72.1
25	582.4	583.8	581.6	754.	754.5	754.1	74.3	714.2	714.3	717.3	73.3
26	582.3	581.2	581.9	708.3	708.7	708.8	71.5	693.6	693.	696.	71.4
27	582.4	583.1	582.4	755.	755.1	756.5	75.3	706.1	707.4	710.	75.3
28	578.9	578.3	577.7	853.9	854.2	852.6	79.	736.9	728.7	733.	77.8
29	588.7	589.	590.3	861.	860.1	860.	78.8	700.2	704.2	710.2	78.
30	579.5	580.1	580.2	877.9	878.5	877.9	81.2	727.5	729.2	732.1	80.5

Aveser.]

DECLINATION MAGNETOMETER.

[1842.

	<i>h. m.</i> 6 00	<i>h. m.</i> 8 00	<i>h. m.</i> 10 00	<i>h. m.</i> 12 00	<i>h. m.</i> 14 00	<i>h. m.</i> 16 00	<i>h. m.</i> 18 00	<i>h. m.</i> 20 00	<i>h. m.</i> 22 00	<i>h. m.</i> 0 00	<i>h. m.</i> 2 00	<i>h. m.</i> 4 00	Means.
Aug. 1.....	593.5	572.7	568.7	574.7	577.5	586.2	556.9	552.9	581.8	561.	556.9	561.7	567.
2.....	565.4	568.7	570.2	575.3	575.4	582.	566.4	559.8	563.	563.2	565.5	565.9	565.7
3.....	566.1	567.4	569.	573.5	577.	568.7	558.4	565.5	564.	566.	569.7	567.5	564.9
4.....	564.2	566.2	568.	573.9	572.4	560.9	554.3	553.	568.2	561.	569.7	567.5	565.8
5.....	567.7	571.7	574.	580.	576.9	565.	556.	557.	562.8	567.	566.	580.	568.7
6.....	566.7	574.6	571.5	577.	576.6	566.6	551.7	556.3	561.5	566.	564.1	565.6	568.9
7.....	566.	566.4	576.	570.5	572.7	560.7	551.	553.	562.	571.7	567.7	565.1	565.2
8.....	.....	560.1	571.	576.	578.8	561.5	554.1	558.1	563.1	563.5	563.	561.8	564.6
9.....	566.5	563.8	566.3	572.8	572.	567.1	556.	564.	557.1	568.8	562.8	562.9	563.3
10.....	571.3	566.6	571.	564.	569.	557.2	548.	546.	548.8	554.9	557.	560.8	559.6
11.....	560.7	563.2	541.6	574.4	565.7	553.1	548.1	548.	557.5	566.	559.	560.7	557.3
12.....	560.	557.1	561.6	567.7	570.5	556.9	548.5	546.9	554.1	554.9	576.9	560.8	559.7
13.....	554.	551.	554.9	556.7	555.5	542.5	535.	536.	545.9	550.	548.8	552.	548.5
14.....	553.5	549.	554.	568.	562.	550.	540.1	540.8	546.8	550.1	559.2	554.4	551.4
15.....	558.3	556.7	560.7	568.	566.5	551.9	542.8	544.	548.2	555.	555.6	561.8	556.
16.....	564.7	553.4	563.	565.	564.5	550.	538.	542.	550.5	561.2	556.	563.4	556.
17.....	566.1	564.3	567.5	566.	560.7	540.9	532.9	539.	566.	568.2	558.6	558.1	556.4
18.....	562.3	562.	563.1	567.5	562.6	548.4	543.1	547.4	551.9	557.	570.3	562.	568.1
19.....	553.	554.2	557.9	.....	567.6	545.7	531.5	558.	561.	563.	578.8	569.4	558.2
20.....	560.7	566.9	565.8	580.3	581.5	566.8	549.3	549.1	565.	567.	564.9	566.8	565.3
21.....	566.4	566.8	569.	577.7	574.5	558.3	548.3	555.	562.8	564.9	572.3	565.	565.1
22.....	562.2	560.1	570.	571.9	576.5	560.2	554.6	555.8	562.1	567.	568.	569.	564.8
23.....	566.9	563.8	.....	576.5	577.2	.....	550.7	558.7	558.7	577.1	570.2	569.9	566.3
24.....	566.2	566.1	565.6	573.1	579.	565.	549.6	561.	561.8	564.	565.2	566.3	564.5
25.....	567.6	571.	570.	577.7	576.7	561.	555.	550.5	564.3	564.	565.	566.3	566.2
26.....	567.6	567.7	572.7	573.2	573.7	569.	556.3	557.1	564.	563.	566.6	566.6	565.7
27.....	564.	567.7	572.7	574.2	573.7	559.	551.4	555.7	562.1	563.5	563.9	563.9	564.3
28.....	565.4	563.6	566.	571.7	571.7	557.3	548.5	551.2	558.6	562.3	564.9	564.2	562.1
Means.....	565.4	563.6	566.	571.7	571.7	557.3	548.5	551.2	558.6	562.3	564.9	564.2	562.1

[1843.

TRIPLE OBSERVATIONS.

Aveun.]

	Declination.			Vertical force.				Horizontal force.			
	<i>h. m.</i> 13 54 8 13½	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 06 8 25½	<i>h. m.</i> 13 52 8 11½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 14 04 8 23½	Tempera- ture Fah- renheit.	<i>h. m.</i> 13 56 8 16½	<i>h. m.</i> 14 02 8 21½	<i>h. m.</i> 14 08 8 27½	Tempera- ture Fah- renheit.
Aug. 1.....	576.5	577.5	578.2	705.	703.1	703.6	67.2	704.8	704.1	708.4	66.
2.....	575.6	576.4	578.	647.8	647.3	647.5	64.5	694.5	695.4	697.9	64.2
3.....	577.6	577.	578.2	679.9	679.6	679.9	67.3	708.7	710.5	713.7	66.9
4.....	572.7	572.4	574.	708.6	708.	709.	68.8	717.2	717.9	724.	68.
5.....	579.7	576.9	577.2	651.	649.7	650.2	64.4	709.	714.7	715.7	63.
6.....	578.	576.6	576.	670.	669.5	669.6	66.2	694.7	695.6.	698.7	65.8
8.....	572.3	572.7	571.8	755.	755.	755.	72.6	735.7	738.1	736.7	71.9
9.....	579.4	578.8	577.	781.1	781.1	781.4	75.	734.4	730.7	739.3	74.4
10.....	573.	572.	571.1	778.	777.2	776.5	73.8	720.	722.	724.7	73.1
11.....	570.	569.	567.2	764.	764.	763.1	73.3	724.	719.5	733.5	73.6
12.....	567.3	565.7	565.3	787.	786.9	786.8	73.8	707.9	712.8	716.2	73.
13.....	570.5	570.5	570.5	771.6	771.2	771.1	72.	706.	710.2	704.4	71.3
15.....	557.	555.5	554.7	782.	781.5	781.	73.9	724.	726.5	727.5	72.7
16.....	562.	562.	562.	799.2	798.4	798.	73.7	722.	722.9	723.2	73.
17.....	567.	566.5	566.	808.	807.5	807.	75.4	727.5	725.9	725.5	74.8
18.....	566.	564.5	564.7	813.	812.6	814.1	77.9	730.5	734.	733.1	77.2
19.....	563.5	560.7	563.3	801.2	807.5	800.1	78.2	760.1	763.2	776.1	78.9
20.....	563.	562.6	561.9	758.5	758.4	758.7	76.2	780.4	781.4	781.4	75.2
22.....	569.4	567.6	565.	744.7	743.9	743.7	73.8	699.9	705.	730.5	74.
23.....	581.7	581.5	580.8	735.9	736.2	736.4	72.	738.3	734.5	737.1	72.5
24.....	576.8	574.5	574.	728.1	727.	727.3	71.	739.	744.	736.4	70.1
25.....	577.5	576.5	575.8	746.4	747.8	747.7	76.2	736.7	736.4	740.	76.3
26.....	577.5	577.2	576.2	786.3	784.	783.5	78.1	752.5	755.4	758.4	77.7
27.....	579.	578.7	578.7	779.1	778.8	778.1	78.7	749.6	757.8	761.2	78.2
29.....	577.3	576.7	576.4	762.5	762.2	762.5	77.2	739.5	740.4	743.	77.2
30.....	574.4	574.1	570.6	738.1	738.1	738.2	73.8	731.7	736.6	731.	74.5
31.....	574.2	573.7	573.	688.6	691.8	691.5	70.5	735.1	739.	730.2,	70.7

SEPTEMBER.]

DECLINATION MAGNETOMETER.

[1842.]

	<i>h. m.</i> 6 00	<i>h. m.</i> 8 00	<i>h. m.</i> 10 00	<i>h. m.</i> 12 00	<i>h. m.</i> 14 00	<i>h. m.</i> 16 00	<i>h. m.</i> 18 00	<i>h. m.</i> 20 00	<i>h. m.</i> 22 00	<i>h. m.</i> 0 00	<i>h. m.</i> 2 00	<i>h. m.</i> 4 00	<i>Means.</i> 22 19½
Göttingen time.....	6 00	8 00	10 00	12 00	14 00	16 00	18 00	20 00	22 00	0 00	2 00	4 00	
Observatory time.....	0 19½	2 19½	4 19½	6 19½	8 19½	10 19½	12 19½	14 19½	16 19½	18 19½	20 19½	22 19½	
Sept. 1	565.5	565.6	571.1	573.7	571.7	557.1	549.	553.4	562.7	*. 563.	563.3	565.1	563.8
2	568.4	568.4	.....	.....	576.3	568.	547.4	546.7	556.4	560.	564.2	561.8	560.8
3	551.4	561.4	573.8	578.8	573.8	563.8	563.	567.4	564.	563.8	572.	567.2	564.9
5	560.4	565.9	573.6	573.6	582.5	561.	545.2	552.	564.	565.7	562.9	562.1	564.7
6	565.2	563.6	566.7	572.8	571.7	580.	555.9	560.5	569.	574.	564.1	566.4	565.6
7	561.9	565.4	.....	.....	577.7	576.9	548.	561.9	561.6	567.	563.7	564.7	563.2
8	564.6	568.2	563.7	580.9	568.2	556.6	547.8	548.8	562.5	567.6	567.6	563.8	563.2
9	564.7	566.2	566.2	574.5	577.8	564.7	549.1	550.	560.9	562.9	562.4	564.	563.6
10	563.1	564.4	572.9	580.5	572.6	569.	561.	560.5	566.9	562.2	564.	575.5	567.4
12	574.6	571.3	567.5	575.	575.5	566.1	557.8	559.1	560.5	563.3	573.	580.8	565.7
13	561.8	563.7	.....	.....	572.7	554.7	555.	557.	560.5	569.8	563.7	566.	563.9
14	568.4	568.7	565.1	572.9	571.1	563.9	557.2	568.	563.8	564.	565.6	564.	563.6
15	565.8	565.9	573.1	574.2	571.	560.	555	556.3	563.	562.6	561.	567.1	563.6
16	568.3	565.8	570.7	573.	557.	558.	557.	568.	564.	563.	561.	567.1	563.6
17	572.2	580.4	576.3	577.1	571.9	563.	555.	558.	563.5	561.5	563.3	567.1	567.1
19	568.9	564.2	568.7	574.	576.4	563.	555.	561.	565.2	566.2	571.5	*569.6	565.4
20	567.8	571.6	568.8	580.2	580.2	564.1	554.6	556.1	566.	566.	573.5	565.2	567.
21	569.1	569.1	572.7	572.2	575.	565.7	554.6	563.4	568.7	566.	576.4	566.2	566.5
22	569.7	566.3	573.9	577.4	578.5	570.7	559.5	563.5	568.6	565.2	563.7	568.8	568.8
23	566.6	573.7	567.5	566.7	569.6	570.6	567.5	566.9	572.7	560.	576.9	576.8	575.2
24	579.3	584.6	580.4	.....	590.1	581.6	571.1	570.4	575.	572.6	571.9	570.	577.
26	574.6	578.5	579.6	580.6	582.8	581.8	577.	573.6	576.1	572.	569.4	567.5	576.1
27	573.	581.2	580.2	582.5	586.3	583.8	572.5	573.7	576.	572.	570.5	568.5	576.2
28	570.1	568.8	567.7	567.7	571.5	567.	560.4	568.1	566.2	569.1	574.	568.2	567.4
29	579.7	581.8	582.6	581.4	579.4	574.5	576.	568.1	572.1	572.1	577.7	570.4	575.9
30	570.2	565.2	580.3	576.9	572.8	570.3	567.4	567.	565.2	565.2	577.2	571.5	570.8
Means.....	567.	569.2	571.6	576.9	576.1	565.3	558.2	558.8	564.5	566.3	568.9	567.5	567.4

* Two minutes late.

SEPTEMBER.]

VERTICAL FORCE MAGNETOMETER.

[1842.

Göttingen time. Observatory time.	<i>h. m.</i> 5 58 0 17½	<i>h. m.</i> 7 58 2 17½	<i>h. m.</i> 9 58 4 17½	<i>h. m.</i> 11 58 6 17½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 15 58 10 17½	<i>h. m.</i> 17 58 12 17½	<i>h. m.</i> 19 58 14 17½	<i>h. m.</i> 21 58 16 17½	<i>h. m.</i> 23 58 18 17½	<i>h. m.</i> 1 58 20 17½	<i>h. m.</i> 3 58 22 17½	Means.	Reduced to 32° F.
Sept. 1.....	740.6	726.6	700.9	702.3	696.4	699.3	706.	720.0	743.3	761.2	766.6	775.	728.2	151.8
2.....	780.1	787.5	.....	.....	757.2	759.7	775.1	.....	834.6	838.7	851.5	842.3	803.	186.1
3.....	839.7	824.9	801.9	756.6	774.7	782.5	791.6	.....	837.	837.	838.2	835.6	810.9	175.1
5.....	773.7	775.	766.6	755.6	763.7	768.	777.2	787.	795.6	804.	815.5	826.7	786.1	172.2
6.....	824.7	814.9	816.9	819.4	800.4	788.6	782.4	792.4	801.4	811.	813.1	806.6	806.	225.5
7.....	791.3	779.	.....	754.3	733.	760.7	776.	781.2	808.7	816.9	842.	835.	788.9	223.1
8.....	832.4	815.4	804.3	800.3	800.	802.	818.1	822.3	850.8	853.	845.9	839.7	822.8	247.7
9.....	839.	838.	829.7	835.7	839.6	842.	851.5	827.	872.	880.4	883.9	880.4	854.9	246.1
10.....	869.5	854.	842.3	827.1	.....	699.	695.3	698.2	704.9	709.3	710.2	706.8	756.1	205.3
12.....	770.	767.6	771.	768.	771.4	782.8	817.9	850.2	868.1	898.4	886.7	880.8	818.6	173.3
13.....	875.5	853.1	823.	823.	815.8	820.2	834.	848.1	846.5	835.	824.3	828.6	836.7	187.4
14.....	810.	775.1	760.5	750.2	745.5	740.1	735.7	738.5	722.	717.9	713.	703.3	742.2	214.4
15.....	709.1	702.1	691.6	682.1	682.1	681.	678.9	683.	691.6	696.6	698.3	696.	691.	195.6
16.....	895.	695.5	694.4	683.7	677.7	675.2	676.1	677.9	685.6	690.2	689.8	696.1	686.4	203.1
17.....	694.	681.8	676.9	684.5	652.8	653.	660.5	678.9	694.5	704.6	701.5	695.1	679.8	211.4
19.....	630.6	674.4	664.5	654.	648.	653.4	662.	700.2	761.	825.	865.7	*891.3	720.8	205.1
20.....	830.2	818.	828.4	825.9	818.7	810.5	791.2	768.7	748.	741.	739.8	713.	785.3	219.6
21.....	702.	746.	765.6	773.1	780.4	791.7	791.9	783.1	773.8	758.6	764.	804.9	769.6	197.2
22.....	836.	820.8	801.	808.2	797.2	789.7	781.	784.3	749.6	758.	751.5	740.8	782.7	215.7
23.....	740.1	767.7	783.8	755.	735.	752.	764.	.....	705.1	770.7	785.5	773.	762.9	205.4
24.....	766.	774.1	785.8	.....	748.	756.	789.3	803.1	804.3	798.	780.3	749.	777.6	198.4
25.....	780.6	787.9	795.7	788.6	771.5	783.	805.1	812.3	809.	810.1	797.7	770.9	792.7	205.5
27.....	747.	775.4	804.3	801.6	794.8	806.3	827.4	838.1	831.	839.	829.5	809.3	807.	202.2
28.....	785.	749.	718.8	686.	670.7	666.	685.3	712.7	735.6	759.7	770.6	762.8	735.2	209.5
29.....	785.5	748.3	797.1	835.2	837.6	842.2	838.2	839.	837.	832.	828.9	813.8	817.9	203.7
30.....	795.3	778.1	800.1	801.4	831.3	840.5	835.3	836.	819.	814.	806.8	787.7	811.3	213.3
Means.....	775.9	774.2	769.6	764.9	757.3	759.4	767.2	772.7	784.2	790.4	792.4	786.3	775.	
Reduced to 32° F.	215.7	212.7	217.4	220.9	209.2	197.8	188.	185.5	184.8	191.	205.2	216.6		204.

• Two minutes late.

September.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

[1842.]

	<i>h. m.</i> 5 58 0 17½	<i>h. m.</i> 7 58 3 17½	<i>h. m.</i> 9 58 4 17½	<i>h. m.</i> 11 58 6 17½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 15 58 10 17½	<i>h. m.</i> 17 58 12 17½	<i>h. m.</i> 19 58 14 17½	<i>h. m.</i> 21 58 16 17½	<i>h. m.</i> 23 58 18 17½	<i>h. m.</i> 1 58 20 17½	<i>h. m.</i> 3 58 22 17½	Means.
Göttingen time.....													
Observatory time.....													
Sept. 1.....	73.8	73.	71.7	71.2	71.5	72.8	75.	76.8	78.9	79.	78.	....	74.7
2.....	76.	74.9	....	....	73.2	75.	78.	....	81.	82.	80.4	79.	77.7
3.....	78.2	77.3	77.	76.3	78.3	77.7	80.2	....	82.5	82.3	81.6	81.1	79.1
5.....	75.4	75.2	75.	76.	75.5	77.	78.2	79.1	79.5	80.	79.7	79.3	77.4
6.....	78.5	77.2	75.	73.7	72.8	73.1	74.5	75.	76.	75.5	75.	73.4	75.
7.....	72.	71.3	....	69.	68.9	70.6	73.2	75.3	76.2	77.	76.2	74.5	73.1
8.....	73.6	73.1	72.2	71.7	71.7	73.	75.4	76.7	77.5	77.	76.	75.8	74.6
9.....	75.3	74.9	74.7	74.8	75.4	76.3	78.8	79.	79.	80.	79.2	78.2	77.1
10.....	76.5	75.1	73.5	72.	....	70.9	71.5	72.4	72.5	72.6	72.1	71.3	72.8
12.....	74.6	75.	75.	74.8	75.9	78.2	81.8	82.9	85.	85.5	84.7	83.8	79.8
13.....	82.7	80.8	....	79.	78.8	80.3	82.	82.	81.3	79.2	78.2	77.	80.1
14.....	74.8	73.2	72.5	71.5	71.3	71.	70.7	70.5	70.	69.3	69.3	69.2	71.1
15.....	68.7	68.4	68.	67.7	67.2	67.5	68.4	69.8	69.9	70.	69.5	69.2	68.7
16.....	68.6	68.	67.5	67.2	66.8	66.5	67.	68.	68.5	68.9	68.5	68.1	67.8
17.....	67.2	66.3	65.2	64.	64.5	64.9	66.6	68.2	69.1	69.5	68.1	67.3	66.7
19.....	65.7	65.	64.2	63.5	63.5	64.8	65.9	71.2	76.8	81.9	82.5	78.	70.2
20.....	76.7	77.3	77.5	76.6	76.5	75.3	74.3	72.3	72.	71.2	69.7	67.9	73.9
21.....	66.9	73.1	73.1	73.7	75.2	76.2	76.2	75.8	74.8	72.8	75.5	79.2	74.4
22.....	78.	75.7	74.5	75.8	75.	75.	74.6	72.9	73.	72.	71.3	70.2	74.
23.....	71.6	74.8	72.7	70.2	71.5	73.6	74.6	....	74.	75.2	75.2	73.	73.3
24.....	73.1	75.5	74.4	....	71.	74.8	77.6	78.8	78.3	76.3	73.8	70.8	74.9
26.....	74.4	74.8	75.	73.	73.7	76.7	78.	79.4	78.	77.5	74.6	72.2	75.5
27.....	70.9	76.6	75.6	74.	75.7	78.4	79.	79.5	80.	79.8	77.5	75.	76.8
28.....	72.4	70.2	67.8	65.6	65.	65.6	68.9	71.4	74.	74.7	74.	72.8	70.2
29.....	71.7	73.7	77.2	78.	79.3	80.	79.9	80.	79.5	79.	77.4	75.4	77.5
30.....	73.3	73.7	76.8	77.3	78.8	78.6	77.6	77.3	78.	76.5	75.	73.	76.3
Means.....	73.5	73.6	73.9	72.3	73.6	73.6	74.9	75.5	76.4	76.4	75.5	74.2	74.3

Degrees Fahrenheit.

SEPTEMBER.]

HORIZONTAL FORCE MAGNETOMETER.

[1842.]

[97]

542

Getting time. Observatory time.	h. m. 6 02 0 21½	h. m. 8 02 2 21½	h. m. 10 02 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 02 10 21½	h. m. 18 02 12 21½	h. m. 20 02 14 21½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 02 20 21½	h. m. 4 02 22 21½	Means.	Reduced to 32°F.
Sept. 1.....	722.	719.1	716.7	715.	748.2	758.5	719.8	701.9	724.2	723.	731.7	739.3	726.6	620.9
2.....	724.9	762.	.....	.....	760.2	774.1	748.2	751.7	734.4	777.	775.7	734.	754.2	640.5
3.....	730.	752.7	745.4	733.4	767.	770.4	752.7	746.3	741.1	758.2	763.7	759.2	751.7	635.2
5.....	729.4	755.8	731.	721.	768.9	766.1	770.	738.2	740.	791.	750.1	760.2	751.8	639.3
6.....	756.1	760.1	752.8	747.1	775.9	760.3	745.5	734.3	739.3	748.	740.3	725.	747.1	642.1
7.....	751.	726.3	.....	720.6	748.6	771.7	760.5	730.	729.2	743.	741.7	737.1	741.8	641.1
8.....	725.	728.1	729.2	721.	742.6	765.6	762.6	734.5	734.8	744.5	750.9	735.	738.7	634.
9.....	733.5	737.4	740.4	732.8	757.2	760.3	792.5	784.7	758.	757.9	757.	763.2	757.9	647.4
10.....	761.7	757.	754.1	737.7	757.	759.7	758.4	746.7	744.	754.5	734.4	758.1	751.9	653.2
12.....	723.5	736.	741.	726.6	754.3	767.3	767.8	761.5	778.7	797.4	790.4	*773.4	759.7	640.7
13.....	772.2	763.4	.....	753.8	784.3	778.8	776.2	765.8	760.	772.6?	779.	732.2	772.5	654.5
14.....	786.4	757.	754.9	748.4	747.7	768.9	756.	747.4	732.	730.	734.2	739.5	749.4	656.2
15.....	723.6	737.3	722.5	715.2	737.8	761.9	754.	736.	740.	744.7	744.5	741.1	738.1	648.3
16.....	737.8	738.7	717.1	717.7	736.9	745.4	726.9	724.7	734.2	731.5	747.2	734.9	731.9	644.2
17.....	760.	751.5	705.8	707.6	731.2	726.6	716.5	723.3	731.	735.1	720.4	718.6	735.8	641.8
19.....	715.7	716.3	714.	706.1	721.1	737.3	711.	681.6	686.7	706.7	783.2	748.8	719.	629.5
20.....	719.7	705.7	716.3	699.7	716.7	739.3	729.4	751.	730.	736.1	721.4	714.	723.3	627.1
21.....	698.	704.	704.	696.6	708.4	768.5	743.3	725.	731.5	726.7	720.2	705.4	718.5	621.8
22.....	696.2	704.4	703.4	678.3	723.1	732.9	721.5	724.5	688.	702.5	677.	698.5	704.1	610.6
23.....	691.6	699.1	725.2	691.8	702.4	715.8	706.4	697.8	694.7	687.5	696.7	693.5	700.2	608.
24.....	666.5	680.3	690.1	663.5	691.7	714.	705.8	692.7	700.2	701.4	712.6	706.1	697.1	600.6
26.....	745.6	743.1	743.5	744.1	739.7	756.2	752.3	758.5	752.3	762.5	765.2	763.4	763.2	653.5
27.....	745.	742.7	746.	754.5	752.1	760.9	773.	764.9	773.5	775.	770.3	768.6	760.9	656.2
28.....	767.5	756.8	742.8	739.1	745.4	744.1	733.7	746.	744.7	759.	756.2	767.7	760.1	667.4
29.....	727.8	738.4	760.5	740.	763.1	803.2	771.3	769.3	773.2	776.	777.5	770.1	764.1	656.6
30.....	766.8	755.7	749.4	740.8	762.3	775.	779.2	766.	763.5	767.7	770.5	763.4	763.4	658.9
Means.....	734.5	735.3	730.2	722.9	743.2	756.6	748.2	738.2	735.3	746.9	746.6	741.8	740.8	
Reduced to 32° F.	635.	636.6	633.5	626.9	647.	659.9	647.	634.	628.8	639.4	641.1	639.8		639.1

* Three minutes late.

SEPTEMBER.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

[1843.]

	<i>h. m.</i> 6 02 0 21½	<i>h. m.</i> 8 02 2 21½	<i>h. m.</i> 10 02 4 21½	<i>h. m.</i> 12 02 6 21½	<i>h. m.</i> 14 02 8 21½	<i>h. m.</i> 16 02 10 21½	<i>h. m.</i> 18 02 12 21½	<i>h. m.</i> 20 02 14 21½	<i>h. m.</i> 22 02 16 21½	<i>h. m.</i> 0 02 18 21½	<i>h. m.</i> 2 02 20 21½	<i>h. m.</i> 4 02 22 21½	Means.
Göttingen time	73.2	72.3	70.8	70.4	71.	72.	74.	76.	78.2	79.	78.1	76.4	74.3
Observatory time	75.2	73.9	70.	77.2	74.5	75.2	77.4	78.8	80.	81.5	80.	78.2	77.5
Sept. 1	77.6	76.3	76.	74.5	75.7	76.8	78.5	80.	81.5	82.	81.4	80.5	78.6
2	74.6	74.4	74.5	74.6	75.	76.4	77.4	78.5	79.5	80.	79.7	79.9	77.
3	78.1	76.2	73.8	72.7	...	71.6	72.5	73.4	74.5	74.8	74.1	72.	74.
4	70.7	70.	70.	67.7	68.3	69.8	72.	73.8	76.	77.	76.	74.	72.3
5	72.9	72.3	71.2	72.7	74.4	72.4	74.4	76.	77.	76.	75.6	75.	73.9
6	74.5	74.3	74.2	74.5	74.9	75.5	72.6	78.6	78.9	79.6	79.	77.5	76.2
7	75.6	74.	72.2	70.8	69.8	69.3	70.2	71.	71.4	71.7	71.4	70.2	71.5
8	74.5	74.7	74.7	74.7	75.7	78.3	81.3	82.5	84.8	86.	84.6	83.7	79.6
9	82.5	80.7	78.4	78.4	78.	79.2	80.5	81.1	80.	78.	77.	75.5	79.2
10	73.2	71.6	71.	70.3	69.5	69.3	69.2	69.	68.7	68.5	68.4	68.1	69.7
11	67.7	67.5	67.	66.5	66.5	66.6	67.5	68.6	69.4	69.7	69.2	68.6	67.9
12	67.8	67.2	66.8	68.2	65.7	65.5	66.	67.	67.8	68.2	68.	67.3	67.1
13	66.4	65.2	63.8	62.8	63.8	63.7	65.	66.8	68.	68.5	67.2	66.4	66.6
14	64.8	64.1	63.4	62.8	62.7	63.2	64.	66.	72.5	76.9	77.8	72.9	67.8
15	72.5	72.5	72.5	71.7	72.6	71.	70.3	69.1	69.2	69.8	68.1	66.2	70.5
16	64.3	68.5	68.6	69.1	70.3	72.2	72.8	73.2	72.8	71.	71.7	73.9	70.7
17	73.1	71.5	69.7	70.7	70.	69.7	69.1	68.3	68.5	68.2	67.7	66.3	69.4
18	66.8	68.7	67.7	65.7	66.7	68.7	69.8	70.4	70.	71.1	71.6	69.7	68.9
19	69.1	70.3	69.8	67.7	66.8	69.6	72.6	74.1	74.2	73.5	71.3	68.7	70.6
20	70.5	70.5	70.6	68.8	69.7	72.	73.7	74.8	74.7	75.4	73.	70.4	71.9
21	68.8	72.3	71.7	69.5	...	74.3	75.	76.3	77.5	78.	76.	73.5	73.9
22	70.8	68.7	66.7	64.5	63.6	64.3	67.1	70.	72.8	74.3	73.8	72.	69.1
23	70.7	70.6	74.	74.2	75.4	76.5	76.4	77.2	77.3	77.2	76.	73.9	75.
24	71.8	71.2	73.5	73.8	74.8	74.9	75.	75.	75.5	75.	73.5	71.4	73.8
Means	71.8	71.5	70.7	70.4	70.5	71.5	72.5	73.7	74.6	75.	74.2	72.6	72.5

Degrees Fahrenheit.

Correction for temperature, 2.5 divisions of the scale for one degree Fahrenheit.

September.]

TRIPLE OBSERVATIONS.

[1842.]

[97]

544

	Declination.			Vertical force.				Horizontal force.			Tempera- ture Fah- renheit.
	h. m. 13 54 8 13½	h. m. 14 00 8 19½	h. m. 14 06 8 25½	h. m. 13 52 8 11½	h. m. 13 58 8 17½	h. m. 14 04 8 23½	Tempera- ture Fah- renheit.	h. m. 13 56 8 15½	h. m. 14 02 8 21½	h. m. 14 08 8 27½	
Göttingen time.....											
Observatory time.....											
April 1.....	571.9	571.7	571.4	695.5	696.4	695.6	71.5	745.2	748.2	749.2	71.
2.....	578.1	576.3	574.5	757.3	757.2	756.8	73.2	757.8	760.2	766.	74.5
3.....	573.2	573.1	572.1	776.7	774.7	776.1	76.3	765.1	767.	769.3	75.7
5.....	581.9	582.5	579.9	763.3	763.7	763.6	75.5	756.6	758.9	760.3	75.
6.....	572.9	571.7	570.6	801.6	800.4	799.7	72.8	773.1	775.9	773.5	....
7.....	577.1	576.9	576.2	733.5	733.	733.	68.9	748.	748.6	750.6	68.3
8.....	567.7	568.2	568.3	800.	800.	800.2	71.7	743.1	742.6	745.3	71.4
9.....	579.4	577.8	577.	839.6	839.0	840.4	75.4	756.3	757.2	757.5	74.9
10.....	573.7	572.6	572.3	.....	.....	.....	....	756.3	757.	758.6	69.8
12.....	575.5	575.5	575.4	771.3	771.4	770.9	75.9	754.6	754.3	757.	75.7
13.....	570.1	568.9	568.9	816.2	816.8	816.	78.8	785.4	784.3	783.	78.
14.....	572.4	571.1	570.5	745.8	745.5	744.7	71.3	750.3	747.7	749.2	69.5
15.....	571.5	571.	570.2	682.6	682.1	682.3	67.2	736.1	737.8	739.6	66.5
16.....	557.2	557.	558.5	677.9	677.7	677.8	66.8	736.6	736.9	734.4	65.7
17.....	572.8	571.9	571.4	652.5	652.8	653.	64.5	721.6	721.2	720.3	63.8
19.....	575.4	576.4	576.	648.5	648.	648.	63.5	721.2	721.1	721.2	62.7
20.....	580.3	580.2	580.6	818.3	818.7	818.2	76.5	712.8	716.7	717.7	72.6
21.....	576.	575.	574.8	779.1	780.4	781.	76.2	705.	708.4	702.	70.3
22.....	577.6	578.5	577.6	797.2	797.2	796.8	75.	718.2	723.1	720.5	70.
23.....	590.	589.6	588.4	733.7	735.	736.2	71.5	701.3	702.4	710.3	66.7
24.....	589.	590.1	590.2	749.	748.	746.7	71.	694.3	691.7	694.7	66.8
26.....	583.4	582.8	583.4	771.5	771.5	771.4	73.7	735.9	739.7	742.2	69.
27.....	584.2	585.3	586.5	784.7	784.8	785.1	65.	744.1	752.1	751.4	....
28.....	570.7	571.5	571.1	672.1	670.7	670.	79.3	743.8	745.4	744.5	63.6
29.....	578.3	579.4	581.4	837.	837.6	838.	79.3	763.5	763.1	763.2	75.4
30.....	574.1	572.8	573.2	831.6	831.3	832.4	76.8	761.7	763.3	764.6	74.8

	<i>h. m.</i> 6 00	<i>h. m.</i> 8 00	<i>h. m.</i> 10 00	<i>h. m.</i> 12 00	<i>h. m.</i> 14 00	<i>h. m.</i> 16 00	<i>h. m.</i> 18 00	<i>h. m.</i> 20 00	<i>h. m.</i> 22 00	<i>h. m.</i> 0 00	<i>h. m.</i> 2 00	<i>h. m.</i> 4 00	<i>Means.</i> 22 19½
Göttingen time.....	0 19½	2 19½	4 19½	6 19½	8 19½	10 19½	12 19½	14 19½	16 19½	18 19½	20 19½	22 19½	
Observatory time.....	0 19½	2 19½	4 19½	6 19½	8 19½	10 19½	12 19½	14 19½	16 19½	18 19½	20 19½	22 19½	
Oct. 1.....	573.3	567.	559.6	577.7	586.	580.7	578.9	578.6	571.5	570.2	568.7	568.2	573.3
3.....	566.6	571.	577.4	577.1	584.1	576.8	568.6	567.	569.5	570.5	569.	577.8	572.9
4.....	574.2	572.	577.8	580.3	589.	577.7	566.	565.1	572.	570.7	569.4	566.5	573.3
5.....	564.7	566.6	571.9	575.6	594.1	569.8	558.2	566.	578.4	576.	575.4	570.5	573.3
6.....	575.	581.8	582.1	586.1	594.	580.6	569.5	573.5	576.	572.	574.2	581.4	578.9
7.....	579.	581.8	588.1	589.	591.6	582.7	574.2	571.	574.	571.5	568.8	568.4	578.3
8.....	570.3	566.2	565.5	585.2	585.7	573.4	568.2	568.	576.7	571.7	579.6	582.5	574.4
10.....	570.2	582.7	583.7	584.5	593.5	585.5	558.4	555.9	582.5	.....	564.	563.1	573.2
11.....	562.1	568.1	568.5	568.5	572.7	569.7	568.4	569.6	561.	561.8	561.7	561.5	564.5
12.....	563.8	565.3	565.6	566.	569.1	574.6	563.5	569.	561.5	563.2	563.	562.6	564.7
13.....	560.1	563.8	566.9	570.1	565.	561.4	560.8	548.2	560.2	559.5	564.5	581.7	561.9
14.....	566.4	561.7	563.8	566.2	570.2	566.1	566.2	558.	559.1	563.7	563.4	564.9	563.3
15.....	565.9	565.5	565.1	563.2	572.1	563.8	553.5	563.6	558.1	564.6	578.5	578.5	565.4
17.....	563.3	568.3	*565.1	554.7	568.9	555.8	552.4	548.6	559.7	561.5	566.	560.7	558.9
18.....	562.	550.4	562.4	567.2	569.3	561.1	553.9	563.1	560.5	573.2	565.8	560.7	560.7
19.....	562.4	568.8	560.4	.....	568.	561.4	549.8	554.9	555.3	559.9	565.8	560.9	559.8
20.....	556.4	557.4	559.5	561.4	569.	557.8	548.5	553.5	556.2	564.	561.7	561.5	559.1
21.....	555.8	562.9	.....	563.	567.4	556.8	545.8	549.5	557.	569.4	558.8	558.9	558.9
22.....	557.8	568.8	560.2	564.3	566.2	554.1	546.4	549.	553.9	553.2	554.5	554.6	556.1
24.....	560.8	559.3	566.3	557.	567.8	562.1	558.7	558.4	560.5	561.5	562.5	567.8	561.9
25.....	562.2	563.2	563.2	567.2	572.4	568.7	557.	566.8	559.5	561.9	564.7	563.6	563.6
26.....	562.3	563.1	557.8	564.9	568.7	563.5	557.6	553.6	552.	560.5	567.	564.5	561.7
27.....	564.1	567.	565.	555.	567.1	556.	558.6	552.1	557.7	562.7	566.8	565.9	561.4
28.....	563.2	561.4	567.7	567.	568.8	564.1	557.7	556.3	559.7	563.	564.2	565.6	562.4
29.....	563.8	563.7	566.4	569.2	564.7	563.5	555.7	556.2	557.9	573.7	580.	569.3	565.3
31.....	565.2	561.5	564.5	565.4	570.7	562.2	556.	556.4	560.	563.9	562.1	566.6	562.9
Means.....	565.	564.3	567.4	569.8	575.2	567.5	558.6	558.5	562.1	564.7	567.	567.8	565.6

* One minute and thirty-seven seconds late.

† Five minutes late.

‡ Six minutes late.

§ One minute late.

[1842.]

VERTICAL FORCE MAGNETOMETER.

OCTOBER.]

Göttingen time. Observatory time.	h. m. 5 58 0 17½	h. m. 7 58 2 17½	h. m. 9 58 4 17½	h. m. 11 58 6 17½	h. m. 13 58 8 17½	h. m. 15 58 10 17½	h. m. 17 58 12 17½	h. m. 19 58 14 17½	h. m. 21 58 16 17½	h. m. 23 58 18 17½	h. m. 1 59 20 17½	h. m. 3 58 22 17½	Means.	Reduced to 32° F.
Oct. 1	770.7	734.9	707.2	705.4	748.7	802.7	825.7	830.1	827.	823.	810.8	791.3	781.5	213.2
3	723.	707.1	717.9	747.7	778.6	816.	823.	826.4	819.5	807.1	807.	815.6	782.4	212.7
4	830.6	827.6	829.7	803.3	797.7	820.2	818.1	807.9	798.	788.	769.	737.6	802.3	221.8
5	707.	680.6	702.1	702.7	742.3	781.4	790.	780.	769.5	761.2	744.4	717.3	739.9	226.6
6	696.1	735.5	744.9	760.9	781.3	798.7	787.6	776.	742.2	714.	706.	749.2	749.4	218.9
7	780.	789.4	783.2	796.	802.4	823.1	831.6	830.8	820.5	812.	798.	765.5	802.3	217.8
8	730.9	696.6	678.3	698.4	731.7	766.2	778.2	791.6	796.7	804.7	789.1	817.	785.8	206.4
10	709.8	714.1	763.9	781.	794.9	818.1	826.8	812.	788.	761.7	736.	704.3	767.5	224.8
11	674.2	683.	739.	760.9	763.9	783.9	772.	767.7	765.	763.	755.	738.1	745.5	228.5
12	716.5	690.6	720.4	878.2	837.1	826.	801.	787.1	773.	769.4	751.2	725.8	772.5	233.8
13	700.4	681.9	711.5	767.4	767.	794.	794.8	794.	791.3	767.6	737.7	719.4	752.2	233.8
14	729.1	*752.7	753.2	752.6	764.7	784.6	777.5	774.1	785.	768.	752.2	740.9	761.2	236.
15	732.4	732.8	757.3	798.4	828.2	821.9	791.	772.9	747.	727.2	699.2	672.1	755.9	241.6
17	725.6	705.7	749.1	779.	800.1	832.7	827.4	809.4	812.9	792.5	766.9	739.	778.4	235.7
18	719.3	749.6	796.9	791.	791.2	820.5	831.3	838.	832.	823.	807.6	793.1	798.6	228.9
19	773.2	747.2	766.7	.....	801.	803.6	782.3	756.	728.9	711.2	711.8	714.1	754.2	238.5
20	744.8	771.1	779.7	796.2	805.2	820.7	803.	766.5	727.	687.7	646.2	677.	752.1	237.8
21	745.8	758.	.....	748.2	743.1	764.6	766.1	773.	779.7	787.4	773.2	756.	763.2	242.1
22	750.9	754.5	754.4	737.8	718.8	760.6	762.9	776.	763.2	773.2	766.6	786.2	760.4	247.4
24	630.3	611.	677.4	696.4	739.5	778.9	789.5	795.	787.	776.5	761.	746.	732.4	241.
25	753.2	807.	837.1	836.5	825.	815.	793.8	783.6	793.1	703.7	677.8	662.	771.5	250.4
26	656.2	707.8	746.5	751.7	744.9	760.1	772.	775.	761.8	748.	735.	734.	741.1	238.1
27	735.7	756.3	763.6	747.8	755.4	762.	750.	752.4	749.	738.5	780.4	761.	751.8	242.9
28	772.5	784.	769.5	734.6	711.6	758.	778.7	784.9	781.	777.1	783.	785.	768.3	232.4
29	787.2	786.6	761.6	745.3	716.8	770.	783.3	784.	781.9	773.5	748.1	712.1	760.2	245.9
31	725.	725.8	753.5	*763.7	765.7	779.6	775.9	769.	750.	762.2	779.4	785.1	761.2	245.5
Means	731.6	732.1	750.6	763.2	771.	794.3	793.6	788.2	777.3	766.	753.	744.	763.8	
Reduced to 32° F.	241.6	239.9	232.2	238.	230.2	227.3	226.6	236.6	235.3	236.8	241.3	236.4		231.9

* One minute late.

† Two minutes late.

‡ Seven minutes late.

§ Six minutes late.

|| Eight minutes late.

[1842.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

OCTOBER.]

	h. m. 5 58 0 17½	h. m. 7 58 2 17½	h. m. 9 58 4 17½	h. m. 11 58 6 17½	h. m. 13 58 8 17½	h. m. 15 58 10 17½	h. m. 17 58 12 17½	h. m. 19 58 14 17½	h. m. 21 58 16 17½	h. m. 23 58 18 17½	h. m. 1 58 20 17½	h. m. 3 58 22 17½	Means.
Sitting time.....													
Observatory time.....													
Oct. 1.....	70.8	68.3	66.2	68.7	74.2	78.	79.	79.2	78.8	77.3	75.3	73.4	74.1
3.....	67.9	66.5	69.8	70.5	76.4	78.	78.3	78.	76.7	75.3	76.	77.6	74.2
4.....	78.	77.3	76.7	75.	75.4	77.6	76.7	76.1	75.	73.2	70.8	68.3	75.
5.....	65.7	64.	66.2	67.4	72.1	74.6	75.	73.8	73.1	71.8	69.7	67.5	70.1
6.....	68.2	71.4	71.2	71.2	75.4	74.9	74.1	72.8	69.5	68.	68.	73.3	71.3
7.....	73.5	73.5	73.7	74.2	77.2	78.4	78.5	78.	77.	75.6	73.2	70.5	75.3
8.....	68.8	63.4	63.4	68.8	70.7	71.5	74.8	76.3	76.8	75.5	73.7	72.7	72.7
10.....	66.9	69.8	73.3	73.	76.3	77.5	76.1	74.1	72.	70.	68.	65.9	72.2
11.....	63.4	65.3	70.4	70.4	73.2	72.6	72.5	72.4	72.4	71.9	70.2	68.6	70.3
12.....	66.6	65.7	71.3	76.5	77.5	75.3	74.1	73.2	72.3	71.2	69.5	67.5	71.9
13.....	65.4	65.8	67.9	70.7	72.8	73.8	74.9	75.	74.	70.2	69.	67.	70.4
14.....	69.3	70.7	69.7	69.8	72.4	72.4	72.7	72.	72.5	71.	69.8	69.	70.9
15.....	67.9	67.5	72.	75.8	76.	73.6	72.3	71.	69.2	67.4	65.	63.6	70.1
17.....	66.7	67.3	71.2	72.3	75.5	76.8	76.8	77.4	75.	73.	70.2	68.1	72.2
18.....	67.3	72.	73.6	71.8	73.3	76.7	77.9	78.1	77.3	76.	74.2	72.7	74.2
19.....	70.5	69.4	72.6	71.8	74.5	73.2	71.1	69.6	68.	67.4	67.4	67.5	70.2
20.....	71.1	71.8	72.4	74.6	75.	74.8	72.2	70.	67.3	64.	61.3	66.5	70.1
21.....	69.9	69.5	69.	68.	70.	71.7	71.7	72.3	73.5	72.3	70.2	68.8	70.6
22.....	69.2	69.6	69.	68.3	70.	71.4	71.4	71.1	70.	72.	73.2	72.4	70.
24.....	59.8	60.2	65.3	65.4	70.	72.	73.4	73.1	72.1	71.	69.4	68.6	68.4
25.....	71.1	76.	76.4	75.5	74.8	73.7	71.9	69.7	67.4	65.5	63.5	62.3	70.6
26.....	63.4	68.	69.9	68.7	69.6	70.8	72.4	70.9	71.	69.	68.	67.9	70.
27.....	68.3	70.8	69.2	68.	71.	69.5	69.8	70.2	70.	68.5	70.2	70.7	69.7
28.....	71.1	72.5	68.7	68.7	67.6	72.1	73.	73.5	73.	72.3	72.1	72.7	71.7
29.....	71.3	69.1	69.6	66.5	68.8	72.3	73.	73.1	73.1	71.	68.1	65.7	70.1
31.....	66.4	67.8	70.2	69.8	70.5	71.3	71.3	70.3	69.4	71.8	71.6	72.4	70.2
Means.....	68.3	69.2	70.4	70.9	72.8	74.	74.	73.6	72.9	71.2	69.9	69.6	71.4

[1842.]

HORIZONTAL FORCE MAGNETOMETER.

Основа.]

Göttingen time... Observatory time.	h. m. 6 02 0 21½	h. m. 8 02 2 21½	h. m. 10 02 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 02 10 21½	h. m. 18 02 12 21½	h. m. 20 02 14 21½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 02 20 21½	h. m. 4 02 22 21½	Means.	Reduced to 32° F.
Oct. 1.....	747.7	742.	742.	718.8	719.6	743.	747.4	755.3	765.	760.9	763.2	760.7	747.1	649.1
3.....	735.	724.9	711.4	715.4	726.7	728.4	731.5	730.8	743.7	728.2	731.4	731.5	736.2	680.2
4.....	730.1	731.7	717.1	718.5	724.9	741.1	725.3	722.	725.	728.	731.	730.	726.2	637.7
5.....	738.	715.5	709.3	691.	718.	733.1	723.9	707.2	717.7	728.	726.2	723.7	718.7	631.5
6.....	716.	700.1	701.	708.	736.5	745.	732.1	721.5	710.5	713.2	705.7	705.	715.4	637.2
7.....	703.4	708.3	697.6	709.2	716.	736.5	736.7	744.6	733.2	744.1	749.	741.7	725.8	637.6
8.....	738.4	738.	742.2	712.6	720.5	753.3	748.7	749.5	772.	750.8	721.5	720.1	738.5	645.5
10.....	715.7	696.7	696.7	709.7	700.8	726.2	819.1	798.2	786.3	.....	772.5	772.6	743.5	661.5
11.....	769.4	755.7	757.9	763.1	768.4	794.9	799.9	795.5	775.2	777.	777.9	777.2	776.8	689.3
12.....	772.3	767.4	770.5	779.	789.8	813.5	814.5	795.1	783.2	776.7	774.7	780.2	784.8	691.8
13.....	764.5	761.3	761.2	761.3	762.9	815.5	822.2	820.2	806.7	786.9	774.7	781.7	786.6	699.4
14.....	766.9	775.4	765.	765.1	783.9	839.8	827.1	803.7	794.8	787.1	789.1	784.	794.3	704.6
15.....	773.	774.6	768.2	775.3	787.5	802.1	803.7	787.	788.7	791.6	779.9	817.2	787.5	699.3
17.....	784.2	767.6	770.3	776.8	784.4	810.	839.9	815.2	811.7	800.5	810.1	786.6	796.4	703.2
18.....	780.9	767.3	786.	772.1	793.7	811.1	807.5	897.7	822.7	823.2	833.1	815.5	809.2	711.
19.....	803.3	785.8	779.4	780.7	793.5	801.2	810.7	775.4	779.1	765.4	773.3	765.9	784.5	697.8
20.....	759.5	767.9	772.5	771.8	792.8	816.3	810.2	779.8	767.1	779.	763.5	745.2	777.1	693.1
21.....	753.6	765.3	.....	762.5	793.8	803.2	797.1	779.	782.	783.3	774.5	773.5	776.9	692.2
22.....	763.3	766.	763.1	770.2	786.2	795.5	793.7	781.	766.	778.2	777.	779.5	777.1	691.4
24.....	780.6	760.9	762.4	767.4	783.2	808.6	806.	801.7	800.	793.7	791.7	789.9	787.2	703.2
25.....	789.3	794.8	796.2	802.	815.1	840.1	834.3	830.7	795.2	787.9	789.2	788.3	802.8	711.1
26.....	767.	766.3	772.2	763.3	779.1	799.	803.5	791.1	798.5	808.7	794.8	779.3	783.6	701.6
27.....	772.9	773.7	769.7	766.	768.	767.3	782.2	789.5	779.2	780.2	781.	786.4	776.	692.8
28.....	776.1	767.	774.8	768.2	771.5	774.6	775.7	796.6	775.7	772.7	803.5	766.	777.5	691.
29.....	779.3	770.5	766.1	763.2	766.7	774.6	791.	778.5	801.7	806.8	808.5	795.3	783.9	697.9
31.....	780.	775.6	769.4	770.9	776.8	806.4	808.3	797.	782.5	775.	781.5	778.2	783.6	698.1
Means.....	760.8	754.	752.5	752.8	763.1	784.1	788.	782.3	775.5	773.	772.4	767.9	768.8	
Reduced to 32° F.	677.1	670.	666.5	666.3	672.1	690.4	693.8	687.3	681.5	681.3	683.4	680.9		679.3

* Two minutes late.

[1842.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

OCTOBER.]

	h. m. 6 03 0 21½	h. m. 8 02 2 21½	h. m. 10 02 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 02 10 21½	h. m. 18 02 12 21½	h. m. 20 02 14 21½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 02 20 21½	h. m. 4 02 22 21½	Means.
Oct 1.....	69.1	66.6	64.5	64.8	69.6	73.5	74.8	75.5	75.8	75.3	73.5	71.7	71.3
3.....	66.6	64.6	66.7	66.8	71.	73.5	74.3	75.	74.5	73.2	74.	74.2	71.2
4.....	74.2	73.4	72.7	71.3	71.1	72.8	72.	72.	71.6	70.5	68.6	66.3	71.4
5.....	63.7	61.8	62.4	63.5	67.1	69.3	70.	69.8	69.8	69.5	67.5	65.4	66.9
6.....	63.7	66.8	66.7	66.7	69.5	70.	69.6	69.	65.8	65.9	65.5	68.7	67.3
7.....	69.	69.	68.6	69.3	70.8	73.1	74.	74.	74.	73.5	71.3	69.	71.3
8.....	66.2	64.7	61.6	65.	66.7	68.	71.1	73.2	74.2	73.4	71.4	75.3	69.2
10.....	65.3	66.6	69.	69.3	71.	72.8	71.7	70.9	69.6	....	66.	64.2	68.8
11.....	61.7	61.6	65.7	65.7	68.2	68.1	68.4	69.	70.	69.9	68.7	67.	67.
12.....	65.2	63.9	67.5	73.2	74.2	72.3	70.8	70.5	70.	69.2	68.	65.9	69.2
13.....	63.7	63.1	64.6	66.7	69.	69.4	70.2	71.1	70.5	67.7	65.	67.7	66.9
14.....	65.7	66.6	66.	66.2	68.3	68.7	68.9	69.5	70.	69.2	68.5	66.3	67.9
15.....	66.7	65.7	68.8	71.3	72.	70.	68.5	68.	66.8	65.2	63.1	61.4	67.3
17.....	64.9	64.7	67.5	68.4	70.5	72.2	72.5	72.9	72.2	70.3	68.5	66.3	69.3
18.....	65.1	67.8	69.4	68.2	69.2	72.3	73.7	75.3	75.5	74.4	73.	71.4	71.3
19.....	68.9	67.	68.3	68.3	69.6	68.4	66.9	66.	65.	64.4	64.3	63.8	66.7
20.....	66.4	67.1	67.4	68.4	69.5	69.6	67.5	65.6	63.6	61.1	58.8	61.4	65.6
21.....	64.1	64.1	....	63.	64.8	66.	66.6	67.5	68.9	68.4	68.8	65.1	65.9
22.....	65.1	65.2	64.5	62.6	63.1	65.8	67.3	....	67.8	69.	69.5	69.2	66.3
24.....	57.9	57.4	61.1	61.6	65.3	67.5	69.5	70.6	70.7	69.8	68.4	67.4	65.6
25.....	68.6	73.5	73.2	73.8	73.3	71.8	70.	67.7	65.4	63.7	62.	60.4	68.7
26.....	60.4	63.5	65.	64.2	64.9	65.8	66.6	66.9	66.2	65.	65.	64.2	64.8
27.....	64.2	65.7	64.7	63.6	65.2	65.2	65.1	66.2	66.	64.8	65.8	65.8	66.3
28.....	65.3	66.5	64.3	63.3	63.2	66.5	67.6	68.7	69.	68.7	68.8	68.7	68.6
29.....	67.2	66.4	66.5	63.8	64.3	67.1	69.	69.	69.5	68.3	68.5	63.5	66.4
31.....	63.1	63.7	65.5	65.2	65.8	66.7	67.	67.	66.4	67.8	68.	67.8	66.2
Means.....	65.5	65.6	66.4	66.6	69.4	69.5	69.7	70.	69.6	68.7	67.6	66.8	67.9

	Declination.			Vertical force.				Horizontal force.				Tempera- ture Fah- renheit.
	h. m. 13 54 8 13½	h. m. 14 00 8 19½	h. m. 14 06 8 25½	h. m. 13 52 8 11½	h. m. 13 58 8 17½	h. m. 14 04 8 23½	Tempera- ture Fah- renheit.	h. m. 13 56 8 16½	h. m. 14 02 8 21½	h. m. 14 08 8 27½	Tempera- ture Fah- renheit.	
Göttingen time.....												
Observatory time												
Oct. 1.....	586.3	586.	584.8	745.9	748.7	752.7	74.2	721.4	719.6	723.7	69.6	
3.....	582.6	584.1	584.8	775.1	778.6	781.7	76.4	721.9	726.7	728.2	71.	
4.....	586.2	589.	588.5	798.	797.7	797.8	76.4	721.9	724.9	726.6	71.1	
5.....	594.3	594.1	.....	740.6	742.3	744.6	72.1	722.7	718.	714.7	67.1	
6.....	594.3	594.	594.	779.	781.3	783.6	75.4	722.7	726.5	728.8	69.5	
7.....	590.5	591.6	591.3	801.	802.4	804.3	77.2	714.5	716.	716.8	70.8	
8.....	586.	585.7	584.8	729.7	731.7	734.	70.7	723.5	730.5	726.7	66.7	
10.....	594.	593.5	592.2	793.2	794.9	796.5	76.3	699.5	700.8	705.	71.	
11.....	572.6	572.7	573.	762.1	763.9	765.2	73.2	766.2	768.4	769.5	68.2	
12.....	569.1	569.1	569.8	837.	837.1	837.5	77.5	792.2	789.1	789.9	74.2	
13.....	565.2	565.	565.9	766.3	767.	767.5	72.8	763.7	762.9	767.	69.	
14.....	569.5	570.2	569.8	763.	764.7	767.2	72.4	.....	783.9	785.2	68.3	
15.....	572.2	572.1	572.5	828.	828.2	828.1	76.	789.1	787.5	786.	72.	
17.....	567.3	568.	568.4	797.9	800.1	801.9	75.5	781.8	784.4	784.5	70.5	
18.....	568.3	569.3	569.	780.3	781.2	782.7	73.3	786.9	793.7	795.7	69.2	
19.....	566.1	568.	566.7	800.5	801.	801.6	74.5	793.	793.5	793.6	69.6	
20.....	568.7	569.	568.7	804.5	805.2	806.5	75.	791.5	792.8	792.6	69.5	
21.....	567.	567.4	567.4	741.9	743.1	744.1	70.	783.2	782.8	784.2	64.8	
22.....	571.3	569.2	563.6	719.	718.8	719.6	67.4	.....	786.2	786.	63.1	
24.....	568.4	567.8	568.1	737.8	739.5	742.6	70.	782.2	783.2	785.5	65.3	
25.....	571.7	572.4	571.5	825.7	825.	823.9	74.8	815.3	815.1	815.8	72.3	
26.....	568.8	568.7	570.8	744.3	744.9	746.2	69.6	775.8	779.1	779.8	64.9	
27.....	567.9	567.1	567.	753.9	755.4	757.2	71.	764.9	768.	772.	66.2	
28.....	568.1	568.8	569.9	712.1	711.6	712.8	67.6	769.6	771.5	772.1	63.2	
29.....	564.3	564.7	565.	715.8	716.8	718.2	68.8	764.2	766.7	766.5	64.3	
31.....	569.7	570.7	571.	764.4	765.7	766.3	70.5	777.4	776.8	779.	66.8	

November.]

DECLINATION MAGNETOMETER.

[1842.]

Göttingen time..... Observatory time.....	<i>h. m.</i> 6 00 0 19½	<i>h. m.</i> 8 00 2 19½	<i>h. m.</i> 10 00 4 19½	<i>h. m.</i> 12 00 6 19½	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 16 00 10 19½	<i>h. m.</i> 18 00 12 19½	<i>h. m.</i> 20 00 14 19½	<i>h. m.</i> 22 00 16 19½	<i>h. m.</i> 0 00 18 19½	<i>h. m.</i> 2 00 20 19½	<i>h. m.</i> 4 00 22 19½	Means.
Nov. 1	562.6	563.	564.2	564.1	571.4	564.4	566.2	568.3	569.	564.5	563.2	563.3	564.
2	565.9	566.9	566.2	571.9	569.4	567.2	563.5	565.3	565.	560.	563.7	562.3	560.6
3	562.7	563.4	571.3	564.3	571.	569.9	562.	547.8	565.5	572.3	565.8	565.3	562.7
4	562.1	565.3	567.8	569.2	570.7	563.5	566.1	566.3	561.7	562.	562.7	562.9	563.4
5	566.	554.1	563.9	564.	571.4	567.5	559.5	567.1	561.5	564.	566.9	566.7	563.6
7	563.5	565.3	565.9	567.	574.2	567.1	565.7	565.	563.2	565.4	566.	566.5	564.6
8	562.3	564.6	565.3	566.5	573.3	566.5	569.	569.1	561.2	566.5	566.8	567.3	564.7
9	566.	565.6	568.	567.	571.7	567.	568.2	568.9	561.	575.	579.	568.5	568.9
10	565.	567.7	563.6	564.	567.4	567.3	560.4	567.6	563.5	574.7	573.	568.3	563.6
11	576.2	573.5	569.3	573.5	570.	561.9	566.7	566.8	561.7	564.	567.	566.7	565.6
12	564.6	566.6	567.1	567.5	569.5	564.7	568.2	560.6	563.	564.	570.	564.8	564.2
14	565.9	566.8	565.7	566.6	570.1	563.9	568.2	560.	564.5	564.5	565.2	565.2	564.7
15	564.7	565.5	567.2	568.1	568.1	566.5	569.5	569.3	564.	566.5	566.	566.3	565.1
16	565.9	566.8	565.	* 574.2	570.8	562.2	563.5	550.	561.6	567.3	566.6	567.3	564.2
17	566.8	565.2	567.	566.6	568.	561.6	564.7	557.	560.2	564.3	563.7	564.1	563.3
18	566.	564.8	567.2	569.2	571.2	562.9	566.2	569.2	562.5	563.4	564.8	563.2	564.2
19	561.4	562.3	566.5	567.6	570.1	563.7	565.2	558.6	563.8	561.5	563.4	562.9	562.8
21	564.2	568.5	568.4	564.5	567.2	569.8	566.6	566.2	566.5	564.5	562.8	563.8	567.
22	564.9	569.	545.8	568.3	544.4	547.7	556.	566.5	561.8	564.2	565.8	564.5	567.5
23	562.9	561.8	564.6	571.4	570.5	565.5	561.	569.7	560.3	561.	570.5	562.6	564.3
24	561.2	560.7	556.9	563.9	567.3	563.6	563.8	566.9	561.1	562.1	566.9	561.8	561.4
25	566.2	562.5	563.2	563.2	566.4	564.7	560.9	569.	561.	563.8	564.	563.2	563.2
26	563.5	563.8	560.7	564.3	565.3	563.8	568.5	568.	569.6	562.2	563.	562.6	562.1
28	563.5	564.9	564.5	563.4	563.5	566.5	560.8	560.3	562.7	562.6	563.5	563.9	563.3
29	565.5	561.8	572.2	565.5	563.8	566.1	569.4	569.4	561.5	563.0	563.8	562.1	563.6
30	561.7	562.8	563.2	563.8	560.9	566.6	554.	567.7	569.	574.5	562.5	562.6	561.6
Means.....	565.4	562.4	564.6	566.2	568.	562.7	566.6	567.4	561.2	565.3	566.	567.2	563.6

* Six minutes late.

November.]

VERTICAL FORCE MAGNETOMETER.

[1842.]

[97]

552

Göttingen time... Observatory time.	<i>h. m.</i> 5 58 0 17½	<i>h. m.</i> 7 58 2 17½	<i>h. m.</i> 9 58 4 17½	<i>h. m.</i> 11 58 6 17½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 15 58 10 17½	<i>h. m.</i> 17 58 12 17½	<i>h. m.</i> 19 58 14 17½	<i>h. m.</i> 21 58 16 17½	<i>h. m.</i> 23 58 18 17½	<i>h. m.</i> 1 58 20 17½	<i>h. m.</i> 3 58 22 17½	Means.	Reduced to 32° F.
Nov. 1.....	796.	788.	790.	780.	757.5	770.7	791.	800.4	790.5	779.5	783.7	789.3	784.7	244.7
2.....	784.2	784.3	794.9	790.6	780.5	784.	780.	780.7	778.7	790.5	804.7	790.4	787.	243.
3.....	784.4	798.1	788.1	752.	712.	754.7	768.5	764.	754.	756.1	757.5	742.9	760.9	245.2
4.....	748.	749.8	744.1	711.7	701.6	726.8	740.7	741.5	712.8	729.	739.7	754.6	735.4	253.5
5.....	739.2	739.4	739.	733.1	731.2	736.6	735.	729.9	712.8	699.2	673.	639.9	716.5	249.4
6.....	704.4	736.1	759.1	743.8	742.9	755.	762.	769.3	768.7	747.5	735.	718.4	745.4	250.
7.....	700.4	703.6	766.4	773.	778.2	820.5	812.9	791.2	775.2	754.	732.5	733.9	761.1	246.8
8.....	761.7	770.6	775.4	775.8	785.7	805.6	804.3	792.9	786.5	761.7	741.	751.8	776.1	238.8
9.....	740.1	*741.1	748.5	720.6	681.1	696.6	714.2	729.5	718.9	706.2	697.	704.5	716.5	262.9
10.....	724.1	743.9	738.9	718.3	700.7	725.	719.8	703.5	691.3	682.2	691.7	692.5	711.1	257.5
11.....	694.2	746.5	747.	749.	742.1	748.7	740.5	742.5	715.8	706.2	717.5	746.5	733.	251.1
12.....	750.	730.7	761.	743.2	734.5	748.9	728.4	717.2	743.	747.5	725.8	719.5	737.5	259.6
13.....	733.8	752.6	742.	735.3	717.	752.4	728.4	726.5	728.7	756.2	785.5	772.1	746.2	260.8
14.....	733.	732.4	724.	†690.7	677.7	720.6	720.	703.2	706.	746.2	765.	789.2	724.8	251.
15.....	790.9	765.8	760.3	759.5	758.9	754.7	754.1	749.8	742.8	760.	794.	811.5	766.9	255.2
16.....	818.1	808.9	803.4	800.	798.1	799.8	751.6	692.8	697.	668.5	686.6	711.1	697.7	269.6
17.....	714.5	759.5	*743.8	726.1	690.	675.3	669.3	668.5	689.3	638.8	628.9	652.	634.4	261.8
18.....	433.6	559.3	646.9	686.2	682.9	676.8	668.9	675.4	665.	636.8	616.	685.5	686.9	269.8
19.....	682.	708.	697.7	692.	652.4	658.4	683.	687.3	673.3	708.6	716.	685.5	686.9	269.8
20.....	708.2	728.	739.3	742.4	702.1	713.	734.9	777.6	804.1	802.4	780.5	768.4	750.1	249.3
21.....	762.3	751.	765.6	757.9	761.7	769.4.	754.	736.4	708.6	717.2	716.	684.6	740.4	255.7
22.....	702.3	720.8	729.	747.2	733.4	750.4	755.5	705.9	704.	716.4	718.	726.8	725.8	247.9
23.....	728.8	723.6	712.2	724.6	733.1	709.3	722.5	738.6	752.5	736.2	733.5	757.	730.2	242.9
24.....	523.3	569.7	624.1	645.	638.9	654.5	660.	663.	630.	619.	622.5	611.1	621.8	265.4
25.....	598.2	638.	638.3	621.3	641.	677.2	689.	673.2	686.	681.7	679.2	668.	655.8	260.3
26.....	647.	624.4	636.5	640.8	616.9	581.2	556.3	626.6	643.5	678.2	703.	711.1	638.8	260.8
Means.....	711.3	724.4	735.2	729.4	717.	729.4	731.4	728.6	732.2	722.5	724.4	724.1	725.	
Reduced to 32° F.	260.4	247.9	261.4	265.	252.6	251.5	249.5	250.7	255.1	250.	257.3	257.		255.2

* One minute late.

† Six minutes late.

‡ Seven minutes late.

§ One minute soon.

[1842.]

HORIZONTAL FORCE MAGNETOMETER.

NOVEMBER.]

Göttingen time. Observatory time.	h. m. 6 02 0 21½	h. m. 8 02 2 21½	h. m. 10 02 4 21½	h. m. 12 02 6 21½	h. m. 14 02 8 21½	h. m. 16 02 10 21½	h. m. 18 02 12 21½	h. m. 20 02 14 21½	h. m. 22 02 16 21½	h. m. 0 02 18 21½	h. m. 2 02 20 21½	h. m. 4 02 22 21½	Means.	Reduced to 32° F.
Nov. 1.....	782.8	778.3	774.1	771.5	773.8	787.8	790.7	791.2	783.	778.5	785.5	779.	781.4	692.4
2.....	764.2	777.3	777.1	762.6	768.6	779.3	775.1	771.3	809.2.	803.9	792.5	790.7	782.6	691.9
3.....	789.1	768.9	775.8	769.3	742.2	774.	781.3	794.	794.7	780.6	773.	768.9	776.	691.
4.....	765.1	763.7	758.8	751.7	761.3	775.	784.7	792.1	763.7	759.	760.2	762.	764.8	687.8
5.....	757.4	761.6	759.7	754.4	767.7	763.1	781.7	770.1	762.8	764.	763.1	761.	765.5	688.8
6.....	755.1	751.4	754.6	752.7	769.1	791.8	794.8	779.5	779.	773.7	775.2	779.5	771.3	687.8
7.....	772.3	766.2	770.2	771.6	785.3	800.2	793.6	780.8	773.5	766.3	754.7	758.0	774.6	689.4
8.....	763.	761.2	763.3	761.2	779.6	805.	799.4	792.7	793.5	784.5	802.	819.	785.4	697.9
9.....	779.6	776.6	772.6	784.6	770.	840.8	818.5	795.5	788.	803.2	810.2	783.7	793.6	720.4
10.....	772.4	797.7	793.4	768.7	790.7	809.2	713.5	777.3	781.1	782.	780.2	786.2	779.4	707.3
11.....	777.6	777.3	773.7	776.	791.	812.5	800.7	801.4	798.9	782.	781.	770.7	786.7	708.3
12.....	782.1	778.7	773.3	770.2	772.3	791.2	783.5	777.5	777.3	779.7	779.	770.7	778.1	700.4
13.....	772.7	774.3	775.3	776.9	779.5	788.6	789.1	774.5	767.2	762.	772.7	776.5	774.1	695.1
14.....	770.	770.5	776.3	771.7	782.5	792.1	803.2	798.2	773.2	772.1	776.7	780.4	780.6	703.9
15.....	785.8	786.	782.6	780.4	794.	801.6	799.4	789.2	782.7	776.7	780.7	788.	787.3	703.6
16.....	791.3	791.8	792.1	791.1	813.3	817.1	803.4	777.2	781.3	760.2	748.9	745.4	781.1	699.9
17.....	746.6	746.6	744.	739.4	761.5	766.7	764.6	744.6	794.4	746.7	760.8	769.4	751.3	688.8
18.....	747.5	736.5	753.1	748.6	771.6	771.8	774.2	776.2	802.5	835.	848.	948.5	792.8	737.3
19.....	691.1	896.6	767.7	776.9	810.	802.3	787.4	790.7	778.	785.4	785.4	798.4	802.2	744.
20.....	797.5	791.	790.3	792.3	786.8	790.7	800.5	801.3	795.5	802.7	801.7	795.5	790.5	713.3
21.....	794.1	793.1	791.1	778.1	792.2	808.8	810.3	794.7	786.3	786.	780.	766.	790.1	722.8
22.....	782.4	777.1	776.	776.3	776.8	790.7	807.5	796.	783.5	782.	787.8	789.3	785.4	711.2
23.....	795.5	789.7	782.4	771.5	776.5	781.1	780.4	784.	784.7	782.	787.3	789.9	783.7	707.
24.....	735.5	729.5	738.5	736.5	744.2	746.6	757.2	754.	747.3	747.5	745.5	780.5	745.2	696.5
25.....	740.1	746.1	745.9	746.	743.1	753.7	766.	756.2	742.2	744.5	756.	759.	749.9	694.7
26.....	753.8	747.3	748.7	746.1	768.7	769.6	763.6	767.	775.7	779.1	787.5	780.1	765.6	710.6
Means.....	776.3	772.1	770.4	766.4	775.9	789.6	785.6	781.	776.9	777.2	779.8	783.6	777.8	
Reduced to 32° F.	704.8	697.4	695.7	693.9	702.7	714.4	709.4	704.5	701.9	701.2	704.3	708.9		703.3

November.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER.

[1943.

Göttingen time..... Observatory time.....	h. m. 6 02 0 31½	h. m. 8 02 2 31½	-h. m. 10 02 4 31½	h. m. 12 02 6 31½	h. m. 14 02 8 31½	h. m. 16 02 10 31½	h. m. 18 02 12 31½	h. m. 20 02 14 31½	h. m. 22 02 16 31½	h. m. 0 02 18 31½	h. m. 2 02 20 31½	h. m. 4 02 22 31½	Means.
Nov. 1.....	67.6	66.9	67.1	65.5	65.5	66.3	66.8	69.5	68.6	68.8	69.	68.8	67.6
2.....	67.7	68.	68.7	67.5	67.	67.5	68.	68.6	69.	70.	70.	68.	68.3
3.....	67.8	68.1	68.9	68.7	67.4	66.4	66.5	68.7	68.	66.4	65.7	63.7	68.
4.....	68.8	68.3	61.8	60.2	61.3	62.1	63.2	64.2	64.	63.8	64.	62.5	62.8
5.....	62.4	63.3	62.8	62.7	63.7	63.	64.	63.2	64.	62.8	61.	68.8	63.7
6.....	61.8	64.8	65.	64.4	64.3	65.7	67.	67.8	67.	68.4	65.8	64.8	65.4
7.....	63.	64.3	66.3	66.6	67.7	69.2	68.8	67.3	66.	65.	64.	65.5	66.1
8.....	66.3	67.1	67.	67.5	68.6	69.4	69.8	70.	66.5	64.6	63.6	64.1	67.
9.....	62.3	62.7	62.2	59.5	59.2	61.	62.	62.5	61.7	61.	60.6	61.4	64.3
10.....	62.3	63.2	61.9	60.7	61.4	61.9	61.2	60.8	60.8	60.5	61.1	60.2	60.9
11.....	61.4	63.4	63.7	63.7	63.9	63.	64.6	63.6	61.6	62.	63.	65.	63.4
12.....	61.3	63.5	63.8	62.2	62.3	63.	62.8	62.8	64.8	64.2	62.6	63.3	63.1
13.....	63.6	65.3	63.2	63.	61.5	64.	62.8	61.7	63.	65.5	66.2	64.3	63.6
14.....	61.8	63.7	62.3	59.5	60.8	62.6	62.2	61.4	62.	64.8	65.5	67.2	63.7
15.....	65.3	64.9	64.4	64.5	64.5	64.8	64.7	64.6	63.8	66.5	68.4	69.5	65.5
16.....	68.6	69.3	69.5	69.7	67.4	68.	69.7	62.2	68.3	59.	58.8	57.	64.5
17.....	58.2	59.5	59.	58.	56.8	56.1	56.5	57.1	56.	56.2	56.8	56.5	57.
18.....	41.3	49.7	54.4	56.8	56.1	56.7	56.5	57.5	56.5	56.	55.	54.4	54.2
19.....	56.2	57.2	56.9	56.7	54.8	55.7	56.4	58.1	58.	60.5	60.	57.7	56.3
20.....	59.8	61.2	60.8	60.5	53.6	60.9	63.8	66.	67.	66.4	65.	64.5	63.9
21.....	64.2	64.2	64.8	63.4	64.9	64.	63.4	61.2	59.7	60.	59.	57.8	58.9
22.....	60.	61.	61.3	61.9	60.6	63.3	61.1	61.5	61.1	62.4	62.2	62.8	61.7
23.....	62.2	62.3	61.	61.8	61.9	60.7	63.3	64.	64.3	62.5	63.2	64.7	63.7
24.....	44.8	48.4	51.3	51.9	52.3	54.5	54.4	55.	51.5	52.2	52.	49.9	51.5
25.....	49.8	52.5	52.5	52.7	53.6	55.4	55.6	55.3	55.	56.5	56.3	55.3	54.1
26.....	53.1	53.1	54.	54.7	51.	50.	49.8	54.2	54.2	58.7	57.5	59.4	54.
Means.....	60.6	61.9	61.9	61.4	61.3	62.1	62.5	62.6	62.	62.4	62.2	61.9	61.8

Degrees Fahrenheit.

NOVEMBER.]

TRIPLE OBSERVATIONS.

[1842.

[97]

556

	Declination.			Vertical force.				Horizontal force.			
	<i>h. m.</i> 13 54 8 13½	<i>h. m.</i> 14 00 8 19½	<i>h. m.</i> 14 06 8 25½	<i>h. m.</i> 13 52 8 11½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 14 04 8 23½	Tempera- ture Fah- renheit.	<i>h. m.</i> 13 56 8 15½	<i>h. m.</i> 14 02 8 21½	<i>h. m.</i> 14 08 8 27½	Tempera- ture Fah- renheit.
Nov. 1	570.9	571.4	572.	758.	757.5	757.6	70.3	772.6	773.8	775.9	65.5
2	570.3	569.4	568.3	780.	780.5	780.5	71.5	769.9	768.6	768.2	67.
3	571.7	571.	572.5	713.	712.	712.	68.	744.	742.2	742.8	64.4
4	571.2	570.7	570.7	700.5	701.6	702.3	66.6	760.3	761.3	761.7	61.3
5	570.8	571.4	573.1	731.	731.2	731.3	68.6	865.5	767.7	769.	63.7
6	573.8	574.2	574.	742.7	742.9	742.1	68.1	767.2	769.1	769.5	64.3
7	572.6	573.3	573.8	777.	778.2	780.	71.8	787.7	785.3	788.2	67.7
8	571.4	571.7	571.9	785.	785.7	787.5	72.5	779.6	779.6	777.7	68.6
9	562.4	567.4	570.5	862.	861.1	860.6	63.9	765.5	770.	768.7	59.2
10	570.	570.	570.8	700.6	700.7	701.4	66.	789.7	790.7	790.7	61.4
11	570.5	569.5	569.9	741.3	742.1	742.5	69.	791.5	791.	792.2	63.9
12	570.3	570.1	570.	735.	734.5	736.3	67.5	769.5	772.3	773.6	62.3
13	567.5	568.1	568.1	718.7	717.	716.7	66.1	778.3	779.5	781.7	61.5
14	571.8	570.8	570.2	877.	877.7	879.2	65.1	778.	782.5	784.7	60.8
15	568.4	568.	568.2	759.1	758.9	759.	68.9	793.8	794.	794.1	64.5
16	571.3	571.2	570.9	799.4	799.1	796.4	70.7	815.4	816.3	816.3	67.4
17	570.	570.1	569.5	692.5	690.	688.6	62.	755.4	761.5	760.	56.8
18	567.7	567.2	571.1	683.1	682.9	683.3	62.2	766.8	771.6	767.5	56.1
19	570.	567.3	544.7	653.	652.4	651.2	59.2	807.5	810.	810.5	54.8
20	570.4	570.5	569.9	702.4	702.1	700.7	64.4	784.8	786.8	784.4	58.6
21	567.4	567.3	567.6	760.5	761.7	764.	70.9	793.1	792.2	791.3	64.9
22	566.5	566.4	565.8	734.3	733.	733.	67.8	775.2	776.8	779.3	60.6
23	565.	565.3	566.2	722.9	723.1	722.7	67.9	778.1	776.5	781.3	61.9
24	563.1	563.5	563.7	639.	638.9	639.4	60.1	742.3	744.2	737.2	52.3
25	563.8	563.8	563.7	639.8	641.	642.3	61.7	788.1	743.1	735.9	53.6
26	561.3	560.9	560.	620.6	616.9	609.9	55.7	767.9	768.7	767.4	51.

Göttingen time.....
Observatory time.....

	<i>h. m.</i> 6 00	<i>h. m.</i> 8 00	<i>h. m.</i> 10 00	<i>h. m.</i> 12 00	<i>h. m.</i> 14 00	<i>h. m.</i> 16 00	<i>h. m.</i> 18 00	<i>h. m.</i> 20 00	<i>h. m.</i> 22 00	<i>h. m.</i> 0 00	<i>h. m.</i> 2 00	<i>h. m.</i> 4 00	Means
Göttingen time.....	0 19½	2 19½	4 19½	6 19½	8 19½	10 19½	12 19½	14 19½	16 19½	18 19½	20 19½	22 19½	
Observatory time.....													
Dec. 1.....	562.8	562.	563.7	562.5	567.9	563.5	558.4	559.3	562.2	562.	564.2	561.7	561.7
2.....	563.	562.3	.....	562.9	564.2	563.5	559.7	559.3	559.7	563.5	563.6	563.5	562.8
3.....	560.7	561.1	562.4	564.3	564.2	562.4	557.2	561.9	561.9	563.5	563.6	563.8	562.8
4.....	562.	560.7	563.	563.2	564.7	560.4	552.8	556.	561.5	564.	564.7	563.4	561.6
5.....	561.9	570.9	563.4	560.9	561.9	562.4	558.5	558.1	559.6	562.	565.	562.	562.2
6.....	564.5	567.7	558.5	563.6	566.8	558.	563.	563.2	560.4	571.	566.3	570.8	562.
7.....	561.7	557.2	560.6	561.8	562.5	563.5	558.7	554.2	559.7	562.5	564.3	563.4	561.8
8.....	568.7	563.	560.7	562.9	564.7	561.8	552.3	551.7	560.	557.2	559.5	567.3	560.
9.....	563.7	562.9	562.1	562.6	565.5	565.	556.1	556.4	559.	561.	566.	574.3	562.8
10.....	563.5	560.5	561.3	561.7	564.5	567.2	557.9	558.4	561.4	563.	563.8	562.6	562.1
11.....	564.	562.8	564.4	565.	566.6	568.1	560.6	560.7	558.2	561.	564.5	568.	563.9
12.....	562.6	557.5	562.4	563.9	563.7	564.7	560.	560.5	563.	564.6	564.	562.5	562.5
13.....	564.6	561.3	561.7	562.8	564.8	565.1	557.1	556.8	562.	563.	565.	565.5	562.5
14.....	.....	561.1	564.6	565.9	565.9	565.	560.	557.9	560.	564.5	563.5	564.5	561.2
15.....	564.5	562.3	564.4	563.6	565.6	560.	558.5	558.4	559.9	564.8	563.2	564.5	562.5
16.....	559.5	560.8	562.5	559.6	568.5	564.1	558.	555.3	560.	564.4	562.9	561.	561.5
17.....	556.5	558.1	559.7	562.3	562.8	563.5	555.	555.2	558.2	563.1	563.2	561.1	560.1
18.....	559.2	558.5	561.5	562.6	565.8	562.4	552.5	553.8	568.5	562.2	562.6	561.5	560.9
19.....	561.2	560.2	566.9	563.4	565.8	562.5	555.5	556.5	560.2	562.1	565.2	562.2	561.8
20.....	563.6	561.2	561.3	561.8	566.5	563.7	559.	565.5	560.	562.2	560.7	561.5	561.3
21.....	560.8	560.	560.8	560.9	567.1	563.3	565.5	562.9	557.	569.8	561.1	562.8	560.2
22.....	560.2	561.6	561.2	561.	565.4	565.3	557.8	554.	559.	562.2	561.4	563.2	561.
23.....	562.8	560.5	561.7	561.9	569.1	566.3	554.9	554.9	558.	560.7	562.5	560.6	561.6
24.....	564.2	560.4	560.6	561.6	566.8	564.7	562.8	550.5	556.7	568.7	565.	560.4	560.2
25.....	559.4	559.3	.....	563.6	565.9	565.7	551.2	551.5	556.	557.5	563.9	562.4	559.7
26.....	560.8	563.9	563.4	564.8	566.1	569.	564.9	559.8	560.	569.2	561.4	568.3	562.6
27.....	558.7	560.4	560.7	561.1	567.6	568.4	558.3	557.	564.6	563.4	563.5	563.4	563.1
28.....	561.7	561.1	562.7	562.7	565.2	564.2	556.9	556.2	560.1	562.3	562.5	564.2	561.6
29.....	561.7	561.9	562.1	562.5	565.3	564.1	556.9	556.2	560.1	562.3	562.5	564.2	561.6
30.....	561.7	561.9	562.1	562.5	565.3	564.1	556.9	556.2	560.1	562.3	562.5	564.2	561.6
31.....	561.7	561.9	562.1	562.5	565.3	564.1	556.9	556.2	560.1	562.3	562.5	564.2	561.6
Means.....	561.7	561.1	562.1	562.7	565.2	564.2	556.9	556.2	560.1	562.3	562.5	564.2	561.6

Göttingen time... Observatory time.	<i>h. m.</i> 5 58 0 17½	<i>h. m.</i> 7 58 2 17½	<i>h. m.</i> 9 58 4 17½	<i>h. m.</i> 11 58 6 17½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 15 58 10 17½	<i>h. m.</i> 17 58 12 17½	<i>h. m.</i> 19 58 14 17½	<i>h. m.</i> 21 58 16 17½	<i>h. m.</i> 23 58 18 17½	<i>h. m.</i> 1 58 20 17½	<i>h. m.</i> 3 58 22 17½	Means.	Reduced to 32° F.
Dec. 1.....	703.9	667.5	695.9	721.2	739.2	719.6	693.7	653.5	646.	647.	632.	589.9	675.8	262.7
2.....	605.6	639.6	667.5	708.3	695.1	715.5	723.3	703.9	694.7	696.	714.	716.4	693.2	251.8
3.....	698.3	688.2	680.8	676.4	688.7	679.2	699.5	750.6	752.2	741.8	742.6	736.6	711.2	252.2
4.....	664.	667.9	693.6	727.7	727.7	736.2	729.	727.	739.2	728.	724.7	755.2	719.1	245.3
5.....	776.5	781.1	764.3	756.3	752.7	757.7	749.1	735.	730.	728.	720.2	692.6	745.2	259.2
6.....	682.	684.9	691.9	728.7	728.	715.9	711.3	694.	685.	669.	662.6	651.1	691.9	258.6
7.....	658.7	676.8	767.5	705.7	696.1	705.7	701.3	678.5	653.9	651.7	669.	686.5	687.6	262.4
8.....	681.1	682.	706.	727.5	726.6	727.1	714.5	712.	697.6	714.2	729.7	714.6	711.1	252.1
9.....	712.9	705.1	695.9	705.2	715.	707.4	686.	668.4	667.2	665.	673.	693.	691.3	255.3
10.....	603.6	631.5	635.5	656.	664.5	672.	677.	684.4	691.	693.4	691.3	689.5	665.	256.
11.....	677.8	647.	621.1	596.9	583.1	562.6	551.8	567.4	561.7	585.	594.2	594.6	595.3	268.6
12.....	584.	593.	595.2	587.3	591.3	603.5	625.5	645.	643.6	641.1	648.4	655.9	617.6	255.8
13.....	658.2	647.8	654.2	663.2	663.1	667.3	702.4	693.5	736.1	784.	792.1	774.	704.6	253.7
14.....	.....	716.1	733.6	755.2	727.1	701.3	713.5	691.5	687.	707.3	717.3	708.8	714.3	262.1
15.....	682.	642.2	656.3	670.4	658.5	637.4	621.	605.1	546.2	600.9	661.5	630.3	633.5	266.3
16.....	598.7	647.2	603.5	657.6	655.5	637.1	573.4	585.	619.4	643.	644.	629.9	609.5	268.1
17.....	636.5	642.6	623.5	616.4	619.7	648.5	674.5	692.2	698.7	691.	663.2	647.3	654.7	260.5
18.....	648.5	648.	696.5	720.1	730.3	708.8	693.9	682.1	675.5	667.	677.5	686.3	686.	264.8
19.....	683.	682.1	675.8	677.	670.	651.4	645.1	673.2	669.4	666.5	659.7	642.9	666.3	269.4
20.....	603.3	685.6	571.1	580.8	568.5	577.6	575.3	571.6	565.2	578.2	595.7	596.9	579.2	274.1
21.....	602.6	621.	627.1	631.	583.	573.7	617.4	670.2	697.5	714.2	738.3	746.5	651.9	260.4
22.....	539.3	572.7	699.	679.5	695.	695.2	683.5	681.	699.9	707.6	707.4	736.8	669.7	259.3
23.....	765.7	770.2	746.6	733.	720.2	715.8	705.9	706.7	713.2	704.	695.5	697.2	723.6	271.4
24.....	690.9	670.	679.	700.	691.3	684.2	671.5	687.	692.	704.2	703.5	701.5	689.6	267.1
25.....	721.2	732.5	700.7	680.6	625.	616.5	640.8	656.	656.	656.	658.	696.5	673.8	267.5
26.....	698.9	707.1	679.	666.9	611.7	637.8	657.4	625.	634.2	636.	658.	671.6	656.3	263.8
27.....	696.1	694.9	692.1	679.4	667.	658.1	615.1	605.5	606.4	629.5	664.5	658.8	654.1	268.
Means.....	661.7	663.5	674.6	661.5	673.8	670.1	668.6	669.6	670.2	675.5	692.4	680.8	672.8	
Reduced to 32° F.	260.8	259.8	261.5	257.6	263.8	262.4	259.6	257.9	254.4	259.3	261.2	262.2		261.1

DECEMBER.]

THERMOMETER OF VERTICAL FORCE MAGNETOMETER.

[1942.

	h. m. 5 58 0 17½	h. m. 7 58 2 17½	h. m. 9 58 4 17½	h. m. 11 58 6 17½	h. m. 13 58 8 17½	h. m. 15 58 10 17½	h. m. 17 58 12 17½	h. m. 19 58 14 17½	h. m. 21 58 16 17½	h. m. 23 58 18 17½	h. m. 1 58 20 17½	h. m. 3 58 22 17½	Means.
Göttingen time.....													
Observatory time.....													
Dec. 1.....	64.1	60.8	66.5	67.1	67.9	64.4	62.4	60.8	60.2	61.1	57.3	56.3	62.6
2.....	59.1	61.2	64.9	65.2	63.9	67.4	67.1	64.5	65.1	64.5	67.1	64.6	64.7
3.....	64.4	62.9	63.1	64.3	63.7	63.5	67.3	69.1	70.2	67.6	69.2	66.6	66.1
4.....	63.9	64.1	66.3	68.5	68.2	67.3	67.6	67.1	67.4	67.1	67.6	70.6	67.1
5.....	71.3	70.3	69.7	69.1	69.1	69.5	67.8	67.5	67.1	66.7	66.1	63.1	68.1
6.....	63.1	63.7	64.5	67.9	66.5	65.7	65.2	64.2	63.3	62.5	61.8	61.2	64.1
7.....	62.5	64.8	66.1	65.1	63.4	65.5	64.1	61.9	60.1	61.8	63.2	64.3	63.5
8.....	62.4	64.2	66.4	66.9	67.4	66.4	66.1	66.3	65.1	67.1	67.3	66.1	66.1
9.....	65.6	64.9	64.4	60.3	62.6	64.5	63.5	62.7	63.1	62.7	63.8	65.8	64.3
10.....	59.2	59.7	60.7	62.2	62.6	63.1	63.5	64.4	64.4	64.1	64.1	63.7	62.3
11.....	61.5	59.5	57.1	55.5	55.1	53.1	54.1	55.6	55.8	56.1	55.7	56.2	56.2
12.....	56.2	57.1	56.4	61.9	56.5	57.8	60.8	60.3	59.6	60.1	60.9	61.9	58.8
13.....	60.5	60.8	61.5	61.9	62.5	65.1	65.2	64.2	71.1	72.3	71.1	69.3	65.4
14.....	61.2	60.4	62.1	62.3	60.7	59.1	58.7	58.2	52.1	59.5	61.8	56.8	65.5
15.....	52.2	53.3	58.7	57.5	59.5	62.1	63.5	65.1	60.1	60.4	59.3	58.7	59.2
16.....	60.2	59.9	60.5	62.1	62.1	63.8	63.2	62.7	62.1	63.8	60.5	60.4	61.2
17.....	60.3	60.7	68.5	67.4	65.4	63.8	63.2	62.7	62.1	62.2	63.3	64.2	63.2
18.....	64.3	63.2	62.4	62.4	60.8	60.1	62.1	62.1	62.1	60.3	60.1	58.3	61.4
19.....	54.9	53.2	53.3	54.8	53.1	55.4	54.5	54.4	54.1	55.5	56.1	56.1	54.6
20.....	57.1	58.4	58.4	58.2	53.8	55.2	60.5	64.8	64.6	68.1	67.6	67.4	61.1
21.....	53.2	55.7	60.8	63.9	63.9	63.3	63.2	63.2	65.7	64.2	65.1	68.1	62.4
22.....	69.6	68.9	67.1	66.2	65.4	64.2	64.3	64.7	65.1	63.5	63.4	64.2	65.5
23.....	61.6	62.1	62.5	62.5	63.2	63.1	62.5	64.6	64.5	64.5	64.1	64.8	63.3
24.....	66.5	66.6	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1
25.....	65.2	65.3	62.5	59.1	57.6	58.8	58.1	61.3	60.1	59.1	62.2	63.5	61.1
26.....	64.1	63.4	63.4	62.8	60.3	58.8	58.1	57.1	59.8	60.4	62.2	59.3	60.6
Means.....	61.7	61.9	63.6	63.4	62.1	62.2	62.3	62.5	62.8	62.9	63.2	63.1	62.5

[1842.]

HORIZONTAL FORCE MAGNETOMETER.

DACHENBERG.]

Göttingen time. Observatory time	h. m. 0 21½	h. m. 8 02	h. m. 10 02	h. m. 12 02	h. m. 14 02	h. m. 16 02	h. m. 18 02	h. m. 20 02	h. m. 22 02	h. m. 0 02	h. m. 2 02	h. m. 4 02	Means.	Reduced to 32° F.
Dec. 1.....	780.	774.5	767.	760.8	768.	788.3	785.8	771.5	764.2	761.8	763.	761.2	770.5	712.8
2.....	753.	749.4	751.	747.6	764.6	777.3	778.3	767.2	763.2	763.	768.	770.5	762.8	698.
3.....	770.7	765.8	761.5	758.5	773.2	784.6	786.9	787.2	779.6	778.4	780.	782.7	775.8	703.8
5.....	770.5	768.7	766.1	769.	778.8	784.3	786.7	782.	765.8	765.7	771.	778.9	775.2	697.7
6.....	777.2	768.4	764.7	771.9	772.8	784.	789.6	795.1	785.7	782.1	785.7	790.	784.8	708.8
7.....	774.7	766.4	769.	774.	783.1	787.8	792.5	797.	808.5	803.1	789.8	780.	786.2	717.
8.....	780.6	776.3	776.7	784.7	783.5	795.6	807.	803.5	791.	775.7	782.3	782.8	785.7	718.4
9.....	783.8	781.2	776.8	772.5	779.4	805.1	839.5	845.5	824.5	811.1	811.	806.8	803.1	730.6
10.....	801.4	802.5	797.1	793.	791.2	800.5	806.2	800.2	792.5	780.	788.5	778.7	793.5	724.
12.....	771.	772.6	772.5	771.2	777.2	785.	795.9	784.8	772.1	775.2	787.7	774.9	778.	713.8
13.....	775.6	769.9	756.8	752.4	768.1	765.6	760.9	769.1	777.8	781.	777.7	781.2	769.7	719.2
14.....	780.2	765.8	771.1	768.8	765.8	779.	791.4	779.	770.4	771.5	798.7	793.	782.9	714.9
15.....	776.2	773.4	772.1	770.4	771.	793.4	800.7	780.2	777.1	788.3	798.7	798.7	785.2	715.5
16.....	.....	780.2	781.	781.1	782.	788.7	795.	797.7	793.9	780.	784.2	783.8	764.	710.
17.....	778.1	768.	765.8	765.9	761.6	773.	776.	769.3	751.8	749.7	753.6	755.4	764.	710.
19.....	761.6	760.6	763.6	767.5	766.2	789.8	792.3	770.7	764.9	773.6	778.	776.5	772.1	719.4
20.....	769.2	770.3	766.3	761.5	761.5	779.1	789.8	783.7	775.7	777.7	778.	774.5	773.9	712.2
21.....	777.2	768.4	770.2	769.5	781.9	794.4	800.2	788.	774.2	771.1	773.5	779.5	779.	712.
22.....	785.5	785.5	773.6	773.4	767.7	781.6	783.9	767.4	749.7	759.	763.1	789.7	773.3	709.1
23.....	763.5	763.5	747.7	745.	748.5	764.2	767.8	755.7	742.5	744.	747.7	761.3	752.6	712.8
24.....	748.	747.8	749.5	750.4	754.	777.8	778.8	754.8	755.	761.5	766.7	770.8	759.6	705.6
26.....	748.2	743.3	751.7	758.2	764.	789.	794.7	779.7	782.9	770.2	772.1	773.8	767.2	705.7
27.....	777.	779.5	777.8	773.5	772.8	789.4	797.7	776.4	766.5	767.	776.	777.4	767.2	707.9
28.....	777.9	763.1	763.	761.9	762.3	782.2	784.6	789.1	767.	770.	776.8	769.6	772.3	707.1
29.....	772.7	774.6	774.4	776.3	766.6	781.8	798.5	786.7	776.6	785.	771.5	779.5	778.6	716.3
30.....	783.4	781.5	779.2	775.8	761.	766.7	787.7	783.2	768.8	772.7	779.	772.4	776.	716.
31.....	768.7	777.1	775.8	774.2	765.6	778.7	793.3	773.5	755.2	757.5	762.5	773.2	771.2	714.2
Means.....	773.7	770.7	768.9	768.1	769.8	787.7	791.2	782.9	772.	773.6	776.3	777.1	775.9	
Reduced to 32° F.	712.7	709.5	705.9	704.4	707.3	726.	728.2	719.2	709.	709.1	711.3	712.1		712.7

[1843.]

THERMOMETER OF HORIZONTAL FORCE MAGNETOMETER

December.]

Göttingen time. Observatory time.	<i>h. m.</i> 6 03 0 21½	<i>h. m.</i> 8 02 2 21½	<i>h. m.</i> 10 02 4 21½	<i>h. m.</i> 12 02 6 21½	<i>h. m.</i> 14 02 8 21½	<i>h. m.</i> 16 02 10 21½	<i>h. m.</i> 18 02 12 21½	<i>h. m.</i> 20 02 14 21½	<i>h. m.</i> 22 02 16 21½	<i>h. m.</i> 0 02 18 21½	<i>h. m.</i> 2 02 20 21½	<i>h. m.</i> 4 02 22 21½	Means.
Dec. 1	57.5	54.8	58.2	58.7	59.4	57.3	56.	54.3	53.8	54.2	53.	50.6	55.3
2	52.1	53.9	56.8	57.7	57.3	60.2	60.	58.7	59.	59.3	60.5	59.	57.9
3	58.5	57.5	57.8	58.	58.6	58.5	62.	64.	65.2	63.5	64.1	62.5	60.8
5	60.4	60.9	62.6	64.6	66.2	64.2	64.	63.6	64.	63.5	63.8	65.5	63.4
6	65.7	64.8	63.5	62.8	62.7	63.	62.	61.8	61.8	61.5	60.5	59.	62.4
7	58.3	58.8	61.	62.	61.4	61.	60.4	60.	59.5	59.	58.	57.3	59.7
8	58.	59.8	60.9	60.4	59.	60.3	59.3	58.	56.	57.1	58.3	59.3	58.9
9	58.2	59.2	60.5	61.3	61.8	60.	62.	62.	60.7	61.9	62.	61.	61.8
10	60.4	60.	59.6	61.2	61.5	60.	59.2	58.5	59.	58.	59.2	60.7	59.8
12	54.5	55.1	56.	57.2	57.8	58.	58.6	59.3	59.7	59.6	59.3	59.	57.7
13	56.9	55.3	58.	51.7	51.	49.5	50.2	51.7	52.	52.	52.	52.5	52.2
14	52.3	52.9	52.7	51.9	52.3	53.	55.2	55.7	55.3	56.	56.	56.4	54.1
15	55.5	55.5	56.1	56.8	56.9	58.7	59.3	58.6	62.	64.5	64.	62.6	59.2
16	59.3	59.3	60.	62.	58.8	59.9	59.7	59.1	59.6	60.8	60.7	59.	59.9
17	56.1	55.	56.7	55.5	54.2	52.8	52.4	50.9	49.7	53.2	55.5	52.5	53.6
19	47.9	48.5	52.2	55.2	54.2	53.	52.1	53.8	55.2	65.8	55.	54.2	53.1
20	55.	55.	54.4	53.5	54.2	56.4	58.4	60.4	60.4	59.	57.	56.8	56.7
21	56.3	56.7	57.5	60.8	60.3	59.5	59.1	58.7	58.2	58.6	59.5	60.5	59.8
22	61.2	60.5	60.	59.	58.	57.4	58.2	58.	57.1	55.6	54.7	52.8	57.7
23	49.3	47.5	47.8	47.7	47.	46.5	47.5	47.5	47.2	48.	46.5	48.7	47.9
24	49.2	50.2	54.	60.4	47.3	47.9	52.5	56.2	56.9	58.6	60.1	66.2	53.6
26	48.3	50.2	54.	56.	57.	57.2	57.3	57.8	60.	59.4	59.7	61.8	56.6
27	68.	62.7	61.6	60.5	59.8	59.	58.8	58.9	59.	58.	57.8	56.2	59.8
28	56.	56.	56.3	58.	57.4	57.	57.2	58.6	59.	59.	58.7	63.6	58.1
29	59.5	59.7	57.	55.5	53.8	53.8	55.8	58.	67.8	56.3	57.5	59.5	58.9
30	58.	59.	56.6	53.3	....	54.3	54.	55.9	55.8	55.2	57.5	57.8	56.
31	58.9	57.	58.5	60.	54.6	53.1	52.1	51.2	52.2	53.3	55.3	53.5	54.8
Means	56.4	56.5	57.2	57.5	57.	56.7	57.2	57.5	57.6	57.8	58.	59.	57.3

Degrees Fahrenheit.

[1842.]

TRIPLE OBSERVATIONS.

Dachau.]

	Declination.			Vertical force.				Horizontal force.			
	h. m. 13 54 8 13½	h. m. 14 00 8 19½	h. m. 14 06 8 25½	h. m. 13 52 8 11½	h. m. 13 58 8 17½	h. m. 14 04 8 23½	Tempera- ture Fah- renheit.	h. m. 13 56 8 15½	h. m. 14 02 8 21½	h. m. 14 08 8 27½	Tempera- ture Fah- renheit.
Göttingen time.....											
Observatory time.....											
Dec. 1.....	566.8	567.9	568.5	739.7	739.2	739.5	67.9	768.1	768.	766.7	59.4
2.....	564.	564.2	564.	698.7	695.1	694.	63.9	762.1	764.6	764.5	57.3
3.....	564.1	564.3	564.1	698.7	698.7	698.5	63.7	772.4	773.2	775.6	58.6
5.....	564.6	564.7	564.2	727.7	727.7	727.	68.2	779.3	778.8	779.5	66.2
6.....	562.8	561.9	563.9	753.8	752.7	751.7	69.	772.3	772.8	775.1	62.7
7.....	565.9	566.8	565.5	726.3	726.	725.7	66.5	783.1	783.7	783.2	61.4
8.....	564.	562.5	561.3	697.	696.1	695.4	63.4	782.2	783.5	781.	59.
9.....	564.	564.7	564.5	726.4	726.6	727.7	67.4	778.5	779.4	778.2	61.8
10.....	565.	565.5	565.	716.4	716.	716.7	....	....	791.2	800.7	61.5
11.....	565.	565.5	565.1	664.	664.5	665.1	62.6	773.5	777.2	776.3	57.8
12.....	566.	566.5	566.1	584.4	583.1	582.3	55.	....	758.1	758.	51.
13.....	566.9	567.1	567.1	590.9	591.3	591.7	56.5	765.2	765.8	767.5	52.3
14.....	563.3	563.7	563.9	663.1	663.1	663.3	63.5	769.6	771.	769.7	56.9
15.....	563.7	564.8	564.3	731.2	727.1	723.8	64.	782.2	782.	781.5	56.9
16.....	564.7	565.9	567.6	659.5	658.5	657.2	60.7	763.2	761.6	763.3	54.2
17.....	564.3	565.6	565.3	658.8	655.5	654.5	59.5	765.1	766.2	763.2	54.2
19.....	566.4	568.5	569.1	618.9	618.7	621.	59.5	758.5	761.5	759.5	54.2
20.....	564.4	568.8	565.	732.	730.3	729.3	63.4	782.	781.9	781.7	60.3
21.....	566.5	565.8	566.	671.1	670.	669.	60.8	769.4	767.7	768.8	56.
22.....	566.6	565.8	566.	568.4	568.5	567.2	53.	746.8	748.5	751.	47.
23.....	566.3	565.5	564.1	586.	586.	583.	53.8	752.2	754.	754.7	47.3
24.....	567.2	567.1	568.	695.	695.	695.	63.9	762.5	764.	764.2	57.
25.....	565.	565.4	565.7	730.1	729.2	729.1	65.4	773.1	772.8	772.2	58.9
27.....	569.	569.1	567.8	692.3	691.3	691.4	63.2	762.7	762.3	762.7	57.4
28.....	566.7	566.8	566.4	626.9	625.	623.7	67.6	765.5	766.6	767.7	53.3
29.....	564.3	565.9	567.4	613.1	611.7	611.5	57.4	763.9	761.	760.	....
30.....	563.9	566.1	567.	608.5	607.	606.1	60.2	766.2	765.6	763.8	54.6
31.....	567.4	567.6	568.8								

MAGNETIC OBSERVATORY,

AT THE

GIRARD COLLEGE, PHILADELPHIA.

TERM DAY MAGNETIC OBSERVATIONS.

FROM JANUARY TO JUNE, 1842.

JANUARY 19, 20.]

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

[1842.]

Göttingen time...	<i>h.</i> 22 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i>													<i>m.</i> 23 30
4	770.6	775.7	765.2	755.6	748.2	748.3	746.1	738.6	718.6	684.7	666.5	665.7	..... 23 30
10	771.3	774.6	764.5	753.	748.7	748.9	748.5	736.5	711.5	681.4	665.9	665.4	..... 23 30
16	772.1	772.9	763.7	751.5	748.6	749.6	747.7	735.	708.	679.7	664.9	666.1	..... 23 30
22	773.3	771.5	768.5	758.4	748.2	749.	747.1	732.6	705.5	676.9	665.3	668.1	..... 23 30
28	776.7	770.1	761.5	752.3	748.5	749.5	747.	729.3	702.3	674.7	664.1	668.1	..... 23 30
34	776.2	774.9	760.1	750.1	748.6	749.6	743.4	727.2	699.5	672.4	663.	670.1	..... 23 30
40	777.	773.1	758.2	751.2	748.	749.6	744.5	723.9	696.1	670.	663.5	670.	..... 23 30
46	777.	768.4	757.7	749.1	749.4	748.9	745.	722.7	695.2	670.4	.....	670.1	..... 23 30
52	776.6	763.3	756.4	749.7	748.9	748.2	742.4	721.	690.7	669.2	.....	673.	..... 23 30
58	776.6	767.9	756.2	749.7	749.6	748.4	739.7	717.	687.7	667.7	666.3	673.3 23 30
Thermometer ...	75.5	73.8	72.8	72.8	73.2	73.2	71.9	70.4	68.4	67.	67.5	69.4 Thermometer.

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Göttingen time...	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i>													<i>m.</i> 23 30
4	674.9	683.7	689.2	675.7	669.6	665.5	663.2	679.2	693.	706.5	728.1	734.1	..... 23 30
10	676.7	683.9	687.4	675.7	661.9	655.	664.2	680.6	693.9	707.7	721.5	726.	..... 23 30
16	677.2	684.1	686.	676.	660.5	654.9	666.6	682.	696.7	709.	725.1	736.	..... 23 30
22	677.4	684.5	685.4	678.6	659.8	653.1	668.	683.5	696.7	710.3	726.5	736.1	..... 23 30
28	679.3	685.3	684.1	672.6	658.8	655.5	669.6	686.1	698.3	711.3	728.	736.5	..... 23 30
34	678.4	685.7	685.	671.1	658.4	656.3	671.2	686.4	699.8	713.6	729.1	737.1	..... 23 30
40	678.9	685.7	680.	669.	657.7	658.	672.7	687.7	701.	715.2	730.1	737.8	..... 23 30
46	681.9	685.6	679.7	666.5	657.	659.	674.7	689.5	702.1	717.	731.1	736.5	..... 23 30
52	682.5	685.7	679.1	665.3	656.1	660.5	676.2	690.2	703.4	718.5	732.6	739.2	..... 23 30
58	682.1	685.5	677.1	664.2	655.7	661.1	676.9	691.7	705.	720.5	733.6	739.1	..... 23 30
Thermometer ...	70.	69.8	69.	67.5	66.9	67.9	70.1	70.9	71.9	73.2	73.9	73.7	.... Thermometer.

MAGNETIC TERM DAY.—HORIZONTAL, FORCE MAGNETOMETER.

[1842.

[illegible]

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

FEBRUARY 26, 26.]

[1843.]

[illegible]

March 23, 24.]

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

[1843.]

Göttingen time.....	A. 22 16	A. 23 17	A. 0 18	A. 1 19	A. 2 20	A. 3 21	A. 4 22	A. 5 23	A. 6 0	A. 7 1	A. 8 2	A. 9 3	Observatory time.
m.	548.	554.6	561.9	612.3	567.9	569.	562.	576.6	561.9	565.7	566.9	562.8	m. .....19 30
6	547.6	551.	560.6	603.3	561.4	569.4	562.6	575.1	563.5	564.3	576.5	563.	.....25 30
12	547.8	555.2	560.	593.4	562.4	569.4	564.5	576.4	561.5	565.2	558.6	562.9	.....31 30
18	548.7	557.3	563.3	584.8	563.9	568.7	563.5	577.3	563.8	564.	566.6	564.1	.....37 30
24	550.5	559.8	567.5	593.5	563.1	568.5	564.6	572.9	565.6	561.7	557.3	563.9	.....43 30
30	552.5	559.2	571.5	580.2	552.4	569.7	564.2	571.6	565.3	560.3	560.8	563.6	.....49 30
36	555.	568.6	574.3	581.8	560.3	569.7	564.7	569.	565.	561.5	561.8	560.9	.....55 30
42	556.2	568.2	577.6	575.8	560.5	561.2	566.7	565.8	566.5	560.3	561.	560.8	.....1 30
48	558.1	568.8	580.1	571.4	560.2	560.3	567.4	564.5	568.5	561.5	559.5	560.17 30
54	561.5	561.2	568.	571.	560.4	563.1	568.1	566.1	568.1	568.4	559.9	559.513 30

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Göttingen time.....	A. 10 4	A. 11 5	A. 12 6	A. 13 7	A. 14 8	A. 15 9	A. 16 10	A. 17 11	A. 18 12	A. 19 13	A. 20 14	A. 21 15	Observatory time.
m.	557.6	559.5	561.9	572.5	572.9	569.	565.	567.	562.2	549.2	550.9	563.4	m. .....19 30
6	558.9	567.5	561.8	573.2	573.5	568.2	562.2	556.2	553.1	549.5	551.7	564.6	.....25 30
12	559.1	567.4	563.5	573.1	573.	569.	562.7	554.4	553.1	550.6	552.	564.7	.....31 30
18	559.6	566.2	567.	570.	572.6	567.3	562.2	553.4	552.4	549.7	552.	564.4	.....37 30
24	558.8	563.8	567.6	574.9	571.7	566.6	561.3	552.3	550.7	550.2	549.5	561.	.....43 30
30	559.4	564.1	567.	573.9	572.1	566.4	560.8	551.8	550.8	550.2	550.	562.5	.....49 30
36	559.9	564.	567.4	575.1	570.8	566.1	559.5	552.1	551.	551.3	550.	560.3	.....55 30
42	559.7	567.7	570.8	572.8	570.	565.	559.5	552.	550.	550.7	551.6	562.2	.....1 30
48	559.6	569.	572.2	574.6	570.1	563.8	557.8	552.3	549.8	551.	557.1	560.2	.....7 30
54	559.5	560.4	572.3	573.5	569.5	564.2	557.	552.	549.	550.6	561.2	569.	.....13 30

MARCH 23, 24.]

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

[1842

Göttingen time.	<i>h.</i> 22 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i>													<i>m.</i> 23 30
4	662.6	664.2	667.4	644.8	638.8	621.5	622.3	629.3	635.	637.7	643.6	647.	.....
10	663.1	665.	666.3	646.	637.	621.	624.	630.1	636.	639.	646.1	648.1	.....
16	663.	664.2	664.6	644.	635.2	620.4	625.	631.1	636.1	639.	645.3	648.5	.....
22	664.	663.8	664.	642.7	633.9	620.2	625.5	631.3	637.2	639.5	645.3	648.	.....
28	664.5	662.	662.2	641.	633.5	620.6	625.6	631.1	636.6	639.1	645.9	648.1	.....
34	664.5	661.2	648.9	639.7	632.6	620.	625.3	631.1	636.1	640.1	645.9	649.1	.....
40	664.2	660.3	645.9	637.7	632.5	620.5	626.4	632.1	636.9	641.4	646.	654.7	.....
46	663.5	659.5	644.9	636.2	629.3	620.2	626.2	632.6	637.3	641.6	647.5	655.6	.....
52	663.7	659.2	645.6	632.5	621.5	621.2	628.	633.8	637.5	642.1	647.5	655.6	.....
58	664.	658.2	645.	630.	621.5	621.1	627.5	634.2	638.2	643.	646.8	656.2
Thermometer	66.9	66.5	65.3	63.1	63.	63.5	64.1	65.	65.2	65.4	65.9	66.3Thermometer.

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Göttingen time.	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i>													<i>m.</i> 23 30
4	655.5	663.5	662.1	660.	655.5	646.6	642.	644.6	657.3	661.2	662.1	669.6	.....
10	657.4	662.2	662.8	659.9	654.4	646.3	641.7	649.6	657.5	661.5	662.5	669.3	.....
16	660.3	663.2	662.6	660.5	653.2	645.5	642.	650.2	658.3	661.3	662.	669.5	.....
22	659.7	663.1	662.	659.6	652.	644.6	642.4	650.6	658.4	661.6	663.5	670.	.....
28	663.6	663.2	661.7	659.7	652.5	644.1	642.4	651.	659.	662.	664.	670.1	.....
34	663.4	663.4	661.5	658.	657.3	643.1	642.8	652.	659.1	662.	665.	670.5	.....
40	663.6	663.2	661.	658.	650.1	642.5	643.1	652.8	659.7	662.1	665.5	671.7	.....
46	663.5	662.1	660.8	657.5	649.6	641.8	643.6	653.7	660.2	662.2	667.1	673.	.....
52	663.7	662.	660.	657.7	648.4	641.6	643.8	654.7	660.5	662.	667.6	673.7	.....
58	663.5	663.	660.1	655.2	647.7	642.	644.1	655.8	661.1	662.5	668.4	674.7	.....
Thermometer	66.4	66.5	66.3	65.5	64.2	64.1	65.	66.1	66.3	66.3	66.8	67.5	.....Thermometer.

Göttingen time...	h. ...22 16	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time.	m.	s.
0	559.8	560.6	562.	567.8	566.7	565.2	565.5	575.9	566.5	564.2	539.8	567.6	...	19	30
6	559.2	560.9	563.2	566.4	566.6	573.	565.9	573.9	568.9	564.1	543.3	568.3	...	25	30
12	559.5	561.2	564.	566.8	570.3	578.1	577.8	573.8	568.1	565.4	547.6	569.	...	31	30
18	557.7	559.2	564.	571.3	567.	575.7	592.8	573.3	568.3	561.8	550.5	570.3	...	37	30
24	560.2	560.	563.2	575.5	565.4	576.5	607.1	571.7	568.2	561.1	552.6	572.4	...	43	30
30	560.3	560.6	564.	577.	564.7	577.	604.6	569.	566.3	563.5	554.5	572.5	...	49	30
36	560.1	561.1	565.6	576.3	565.5	567.6	593.4	566.8	566.1	560.2	559.2	573.4	...	55	30
42	560.1	562.	565.5	572.5	567.	561.7	586.3	566.	565.2	549.	559.2	576.3	...	1	36
48	560.	563.	568.9	570.7	566.8	564.	588.6	566.4	565.7	541.4	560.7	573.9	...	7	30
54	560.7	562.	565.	561.	566.1	553.2	578.5	565.5	564.5	537.5	560.	574.7	...	13	30

Göttingen time...	h. ...10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time.	m.	s.
0	572.5	581.4	558.8	570.5	569.2	560.2	552.7	552.1	557.	548.1	553.9	558.9	...	19	30
6	572.3	580.6	558.6	570.4	569.4	568.2	554.5	551.2	555.4	548.6	554.	559.4	...	25	30
12	572.1	581.6	561.1	570.	569.3	568.4	555.4	551.7	554.1	549.	555.7	560.	...	31	30
18	572.	578.2	562.4	570.	568.1	566.8	554.4	552.7	554.1	548.7	556.1	559.9	...	37	30
24	571.6	572.9	562.7	568.4	568.	567.5	553.8	553.1	554.6	548.8	555.	559.	...	43	30
30	577.	570.	562.5	568.	568.2	567.8	554.3	552.7	554.	549.2	555.	560.	...	49	30
36	578.6	569.1	563.7	568.4	567.8	567.5	554.3	554.4	553.3	551.2	555.5	560.9	...	55	30
42	578.6	566.9	567.9	571.4	566.5	566.3	555.7	555.2	551.6	552.1	555.7	560.1	...	1	30
48	578.5	560.7	568.5	571.2	565.	562.5	554.8	555.4	550.5	553.	556.8	560.7	...	7	30
54	570.3	559.6	568.3	569.7	562.7	563.	553.5	556.	549.3	553.6	557.9	559.	...	13	30

[1843.

MAGNETIC TERM DAY.--HORIZONTAL FORCE MAGNETOMETER.

APRIL 20, 21.]

[illegible]

[1842.]

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

APRIL 20, 21.]

Göttingen time...	<i>h.</i> 22 16	<i>h.</i> 23 17	<i>h.</i> 0 13	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i>													<i>m.</i> 23 30 29 30 35 30 41 30 47 30 53 30 59 30 5 30 11 30 17 30
4	750.9	752.	752.6	752.1	749.8	741.4	748.2	728.1	705.3	683.2	672.6	659.1	
10	751.	751.6	752.	752.5	749.2	743.3	744.9	725.2	703.6	682.	672.1	657.9	
16	751.	751.5	752.2	752.4	748.	742.4	743.	723.	701.5	680.8	671.6	655.6	
22	751.2	752.	751.2	754.4	746.6	741.	741.3	720.6	699.	680.9	671.	653.3	
28	750.4	751.8	751.5	754.1	745.5	741.8	745.8	718.1	696.8	682.1	669.5	650.8	
34	750.6	751.5	752.	754.1	745.1	743.8	741.7	715.5	693.4	678.6	663.7	647.7	
40	751.	752.	752.	752.3	745.4	740.7	740.7	712.4	691.4	676.	666.2	643.6	
46	751.	751.3	752.7	751.9	741.4	717.6	738.3	711.	689.	675.	663.7	641.6	
52	751.8	751.8	752.2	751.1	743.5	748.2	734.6	708.2	687.1	674.3	666.3	638.5	
58	751.2	751.8	752.2	750.2	742.2	750.4	732.9	707.	685.3	674.2	662.9	637.	
Thermometer	73.5	73.8	73.4	72.5	71.3	70.4	69.3	68.	66.9	65.8	64.8	63.5	Thermometer.

Göttingen time...	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i>													<i>m.</i> 23 30 29 30 35 30 41 30 47 30 53 30 59 30 5 30 11 30 17 30
4	633.8	615.4	605.2	616.2	655.	686.3	702.3	706.3	710.1	713.	717.5	719.7	
10	631.8	613.6	605.4	619.	659.3	698.5	703.	707.3	710.2	713.4	718.3	719.2	
16	628.1	612.4	603.2	622.7	662.7	690.8	703.2	708.1	710.5	713.3	718.1	718.7	
22	626.9	611.8	602.7	625.	666.3	693.1	701.	708.9	710.6	714.	718.	718.5	
28	626.6	610.	603.4	631.3	669.9	695.	704.	709.2	710.4	714.9	718.4	718.8	
34	626.	608.4	606.1	633.	673.1	696.1	704.5	709.1	710.3	715.5	719.3	718.4	
40	622.8	608.5	608.6	639.	675.9	697.5	704.2	709.	710.8	716.1	719.8	717.4	
46	620.9	607.	610.6	643.2	678.7	698.3	701.	709.	710.8	715.8	720.	716.7	
52	618.7	606.8	611.	644.7	681.1	699.9	704.4	709.8	711.5	716.2	720.	716.	
58	617.9	606.3	613.2	651.2	683.5	701.2	705.	710.	712.	717.	719.4	716.5	
Thermometer	61.7	61.6	63.5	67.2	69.7	70.8	71.	71.4	71.7	71.6	71.6	71.9	Thermometer.

MAY 27, 28.]

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

[1843.]

Göttingen time...	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	Observatory time.
<i>m.</i>	23	23	0	1	2	3	4	5	6	7	8	9	3						<i>m.</i>
4	686.1	689.9	699.8	708.	713.9	718.4	720.5	720.	717.	718.2	715.	709.6							23 30
10	686.2	691.2	700.5	703.2	711.	718.9	720.4	719.8	717.	718.	714.8	709.5							29 30
16	687.1	692.1	701.2	709.8	714.7	720.	720.5	719.6	717.7	718.1	714.3	709.							35 30
22	687.2	693.1	702.2	710.8	715.	720.3	720.5	718.7	717.7	717.3	714.	707.6							41 30
28	688.	691.	703.5	711.1	715.8	720.5	720.2	718.6	717.1	717.3	713.5	707.1							47 30
34	688.4	695.4	704.2	712.	716.2	720.5	720.3	718.1	717.1	717.	713.7	705.1							53 30
40	689.3	696.	705.6	712.	715.3	720.	720.	718.	716.9	716.	712.	702.6							59 30
46	690.	697.	706.4	712.3	716.5	720.	720.3	717.7	717.4	716.5	712.7	702.							5 30
50	690.4	698.	707.	713.	717.6	720.8	720.1	717.9	717.9	715.1	711.6	703.7							11 30
56	690.	698.7	707.5	713.6	718.1	720.6	720.	717.	716.3	715.	710.9	703.6							17 30
Thermometer...	70.3	71.4	71.8	72.	72.	72.	71.7	71.3	71.	70.2	70.2	69.5							Thermometer.

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Göttingen time...	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	<i>h.</i>	Observatory time.
<i>m.</i>	10	11	12	13	14	15	16	17	18	19	20	21	16						<i>m.</i>
4	702.6	698.7	695.7	704.8	719.1	731.7	742.5	750.	754.5	757.1	764.7	774.5							23 30
10	702.7	698.9	696.1	705.6	720.8	732.5	743.8	751.	754.3	757.5	766.1	775.9							29 30
16	701.5	698.9	696.6	707.2	722.	733.9	744.3	751.5	754.3	757.5	767.1	776.6							35 30
22	700.6	699.	696.5	708.2	722.	735.6	745.8	752.	754.9	758.1	768.2	778.							41 30
28	703.	697.5	697.	709.5	723.8	737.	746.9	752.5	755.2	759.	769.4	779.							47 30
34	701.1	697.	699.	712.6	725.	737.5	747.2	752.9	755.6	759.9	770.7	780.							53 30
40	700.9	697.2	698.6	711.3	726.2	738.2	747.8	752.6	756.3	760.3	771.3	780.5							59 30
46	700.5	696.2	700.2	713.7	727.2	739.5	748.2	753.4	756.	760.6	772.	781.							5 30
52	700.2	696.6	701.9	716.4	728.2	740.2	748.7	753.7	756.7	762.	772.8	781.3							11 30
58	700.1	697.2	702.6	717.	730.1	741.8	749.5	754.	756.6	763.5	774.7	782.							17 30
Thermometer...	69.6	69.3	70.6	71.8	72.2	73.8	74.4	75.	75.1	76.4	77.1	77.6							Thermometer.

[1842.

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

JUNE 22, 23.]

Göttingen time.	h. 22 16	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time. m.
0	558.6	556.9	557.	570.7	562.8	569.4	570.2	576.9	569.3	563.5	565.5	546.	19 30
6	558.3	557.	556.4	569.4	565.4	600.	569.8	575.2	582.	562.6	566.6	547.2	25 30
12	557.7	557.	558.3	563.7	564.9	597.4	572.5	575.3	577.7	564.5	564.8	546.6	31 30
18	557.4	556.8	562.2	560.6	561.9	593.1	573.9	583.3	575.3	564.	565.7	546.2	37 30
24	557.1	557.	561.	560.9	563.4	591.	576.5	576.9	574.1	569.5	565.6	547.6	43 30
30	557.2	557.5	561.8	559.2	565.7	586.8	578.1	574.7	569.6	571.8	566.8	547.8	49 30
36	557.2	557.2	563.5	557.6	565.5	593.9	582.9	576.5	566.9	572.7	567.4	551.4	55 30
42	557.3	558.4	565.2	561.4	576.5	577.6	583.6	580.	562.8	572.9	569.8	552.6	1 30
48	557.	556.5	570.	564.4	580.5	575.3	580.4	586.9	562.7	572.4	550.6	554.6	7 30
54	556.4	556.7	570.8	564.9	598.2	570.3	579.8	592.9	563.	567.5	548.8	555.6	13 30

Göttingen time.	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time. m.
0	557.8	579.	578.1	571.2	570.9	570.5	565.	580.	560.	559.2	551.3	555.1	19 30
6	557.9	570.	575.9	571.6	571.2	568.2	565.3	601.9	558.3	557.	553.7	554.3	25 30
12	560.6	570.	575.5	571.7	572.4	567.1	564.	559.5	558.1	557.	554.7	555.2	31 30
18	561.8	570.	573.8	570.	571.4	569.2	562.6	561.	558.	555.8	555.1	554.5	37 30
24	562.9	570.7	572.7	569.6	569.9	569.	562.2	560.	558.7	555.4	557.	554.8	43 30
30	565.6	571.6	575.6	569.2	571.5	568.1	561.8	559.5	559.5	554.3	559.	556.8	49 30
36	568.2	575.	575.1	570.3	572.1	567.	561.7	559.8	560.	554.3	559.3	556.2	55 30
42	568.3	576.5	575.	569.3	571.8	565.8	561.5	560.	560.	554.3	559.6	558.	1 30
48	570.	577.7	570.7	569.1	571.1	566.1	561.2	561.	559.2	553.8	557.1	558.	7 30
54	570.	578.7	571.2	570.4	570.2	565.9	561.	562.1	559.	551.9	556.9	558.4	13 30

MAGNETIC OBSERVATORY

AT THE

SIRARD COLLEGE, PHILADELPHIA.

**TERM DAY MAGNETIC OBSERVATIONS,
FROM JULY TO DECEMBER, 1842.**

JULY 20, 21.]

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

[1842.]

[illegible]

[1842.

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

August 26, 27.]

Göttingen time	<i>h.</i> 22 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
835.9	845.5	850.	851.6	851.	851.	851.6	844.9	830.4	822.7	814.1	801.5	795.6	<i>m.</i> 23 30
837.	845.8	850.3	851.1	851.2	851.5	851.5	844.6	836.6	822.2	812.1	801.3	791.7	29 30
839.7	847.8	850.2	851.	851.9	851.	851.	845.	827.7	820.5	811.4	801.7	791.3	35 30
839.	848.4	850.2	851.6	852.	850.1	850.1	837.	827.7	818.5	810.9	799.1	790.	41 30
842.	849.	850.	851.3	852.	848.6	851.3	831.6	827.	818.2	810.7	798.7	790.	47 30
842.	850.1	850.2	851.7	852.	849.3	852.6	829.7	825.6	818.	812.7	798.5	790.3	53 30
843.2	851.1	850.	850.9	852.6	848.	848.	834.8	825.4	815.9	808.5	799	788.	59 30
843.5	850.2	850.1	851.2	852.5	847.6	832.1	832.8	824.8	814.6	805.	795.7	788.	5 30
843.9	850.2	850.3	851.	852.	846.5	845.8	830.9	824.5	814.4	805.	795.7	788.	11 30
845.	850.9	850.2	851.2	852.3	845.8	845.8	830.9	824.5	814.2	800.2	792.5	787.6	17 30
Thermometer	84.7	84.5	84.2	84.1	83.3	82.9	82.2	81.1	80.	79.	78.5	78.2	Thermometer.
Göttingen time	10 4	11 5	12 6	13 7	14 8	15 9	16 10	17 11	18 12	19 13	20 14	21 15	Observatory time.
737.1	732.6	733.	732.5	732.1	729.1	734.2	739.7	737.6	807.	815.	805.	839.2	<i>m.</i> 23 30
737.1	732.1	732.2	731.8	729.	735.4	735.4	730.5	739.1	806.7	816.	812.5	840.8	29 36
736.1	732.7	732.1	730.8	730.	736.	736.	731.6	739.3	807.5	816.4	819.7	842.	35 30
735.4	732.3	732.	730.8	730.8	737.2	737.2	732.9	800.	808.6	817.	823.7	842.1	41 30
735.1	732.4	731.8	729.7	731.8	738.1	738.1	733.4	801.	809.4	818.	828.	843.3	47 30
735.1	732.9	733.	729.7	731.6	738.2	738.2	734.5	801.5	812.4	*814.	831.1	844.	53 30
735.	732.2	733.	730.1	733.2	738.9	738.9	734.9	802.8	811.4	*802.1	833.	844.	59 30
733.2	732.5	733.	729.7	733.5	738.2	738.2	735.9	803.8	812.1	*768.4	835.	844.	5 30
733.	732.	733.	729.1	733.5	738.2	738.2	736.1	804.6	813.	782.5	836.3	844.2	11 30
732.6	732.4	732.4	728.8	733.3	738.6	738.6	736.9	805.8	814.	796.2	838.	844.7	17 30
Thermometer	78.1	78.2	78.1	77.9	78.6	79.5	80.2	81.3	82.3	83.5	84.5	84.8	Thermometer.

* Sun on west end of needle.

SEPTEMBER 21, 22.]

MAGNETIC TERM DAY — DECLINATION MAGNETOMETER.

[1942.]

Göttingen time.	<i>h.</i> 22 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i> 0	558.7	561.	566.	567.	576.4	585.5	586.2	586.8	589.7	583.7	586.3	574.8	<i>m.</i> 19 30
6	557.	561.	564.	574.	573.	586.7	587.3	587.1	584.4	585.	587.	573.8	25 30
12	556.2	561.	563.8	586.	574.1	586.2	586.8	587.7	588.6	583.4	589.6	578.2	31 30
18	556.6	563.	565.	601.8	572.9	585.6	586.	589.	589.8	580.6	570.9	572.	37 30
24	557.5	564.	564.1	614.2	570.2	585.1	586.8	587.8	583.2	581.4	572.3	571.7	43 30
30	558.5	564.	564.2	613.2	567.	585.6	586.1	587.9	581.2	584.2	572.9	572.9	49 30
36	557.2	563.	564.2	608.9	567.6	586.	585.4	589.1	582.6	586.	572.6	573.3	55 30
42	558.5	561.6	564.5	607.5	567.5	586.2	585.7	570.	580.8	585.8	572.4	574.6	1 30
48	559.	561.5	564.3	600.	565.5	585.4	585.7	572.	580.8	585.2	572.8	573.3	7 30
54	560.1	566.	564.	589.2	564.3	585.8	587.	571.1	581.5	585.9	573.	575.5	13 30

Göttingen time.	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i> 0	573.9	564.5	577.4	578.	578.5	577.4	570.7	585.1	559.5	583.6	553.5	557.1	<i>m.</i> 19 30
6	572.4	565.5	577.6	576.9	577.6	576.2	589.7	584.7	559.3	583.8	554.2	557.9	25 30
12	570.6	567.	578.2	576.6	577.4	575.	589.8	583.6	559.2	582.7	554.9	558.	31 30
18	566.9	568.3	578.7	577.7	579.5	573.5	589.5	583.4	558.	581.8	553.2	558.	37 30
24	565.8	571.	579.8	577.4	577.7	573.	586.6	582.9	557.3	582.5	553.1	557.7	43 30
30	563.3	573.9	580.6	576.6	576.	573.7	587.8	582.4	558.2	584.8	553.7	568.	49 30
36	562.6	575.3	580.6	577.5	578.2	573.6	587.7	580.8	558.4	580.6	553.4	559.	55 30
42	562.	576.6	581.	574.6	576.9	573.6	588.	580.5	558.4	581.6	554.	558.6	1 30
48	563.3	576.8	578.8	577.1	576.	571.1	586.8	580.9	556.8	582.6	555.2	559.	7 30
54	564.3	577.1	578.1	577.6	576.8	572.2	585.8	580.	555.3	582.5	556.	559.	13 30

SEPTEMBER 21, 22.]

MAGNETIC TERM DAY.—HORIZONTAL FORCE MAGNETOMETER.

[1842.]

[97]

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Göttingen time	<i>h.</i> 22 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i> 2	721.5	744.6	728.7	736.5	720.2	706.4	705.4	703.7	696.2	699.6	704.4	707.1	<i>m.</i> 21 30
8	723.3	740.5	718.7	743.5	714.7	707.2	702.7	700.9	699.4	702.	706.7	704.2	27 30
14	726.4	740.	720.4	747.5	716.5	697.5	699.8	708.3	705.7	703.7	702.8	705.2	33 30
20	739.	741.6	719.2	739.9	706.6	706.	707.7	701.	706.8	708.9	704.	703.4	39 30
26	738.3	739.4	720.2	713.5	706.2	698.8	701.3	702.5	706.5	709.6	706.1	693.	45 30
32	740.5	737.5	721.5	696.	713.1	702.2	705.2	707.	712.2	708.5	707.6	697.7	51 30
38	743.	734.5	722.	691.5	713.	701.5	705.6	699.2	709.6	705.	710.3	695.6	57 30
44	744.6	736.8	719.7	683.5	709.2	695.2	705.	695.5	705.3	704.3	710.4	705.7	3 30
50	750.	736.2	720.	693.8	711.2	704.6	701.4	689.7	701.7	704.	709.6	705.5	9 30
56	746.7	734.8	728.5	697.2	709.5	701.7	699.5	694.3	705.2	703.9	708.9	708.8	15 30
Thermometer	72.7	71.9	71.	70.9	71.9	73.	73.9	73.7	73.9	72.	71.3	69.8	Thermometer.
Göttingen time	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i> 2	702.4	703.8	678.3	706.4	723.1	724.6	732.9	732.	721.5	731.8	724.5	707.4	<i>m.</i> 21 30
8	707.8	702.6	676.9	697.7	720.5	727.9	736.	727.7	717.4	726.	721.5	694.7	27 30
14	707.	700.3	676.8	700.	717.4	735.4	737.3	735.4	724.3	722.3	714.5	700.	33 30
20	707.6	697.2	674.7	701.1	719.2	728.2	736.9	722.	726.3	725.1	715.	696.6	39 30
26	706.9	698.3	674.6	707.3	721.5	737.5	733.4	728.	717.5	722.5	712.2	700.	45 30
32	705.3	688.6	698.2	703.6	720.8	726.	731.	737.	712.	726.5	710.3	699.	51 30
38	704.7	688.9	704.1	710.1	725.7	729.1	737.7	728.1	713.9	733.8	709.5	695.	57 30
44	704.2	689.6	706.1	716.	719.7	731.2	734.5	723.7	714.2	722.1	711.5	686.8	3 30
50	705.	683.2	700.1	713.5	725.6	732.8	733.8	733.7	717.9	721.4	711.2	690.	9 30
56	705.8	680.2	700.4	718.2	725.	733.4	732.	717.7	727.7	720.9	708.7	690.2	15 30
Thermometer	69.9	70.5	70.6	70.5	69.9	70.	69.5	69.1	69.1	68.7	68.2	68.2	Thermometer.

[illegible][illegible]

[1943.]

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

OCTOBER 19, 20.]

Göttingen time.	<i>h.</i> 23 16	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i> 0	555.2	559.9	563.7	565.8	561.3	560.9	560.2	556.4	559.1	557.4	557.1	<i>m.</i> 19 30
6	555.4	559.1	564.	565.6	560.5	561.2	560.	557.3	555.3	557.7	557.6	25 30
12	559.3	561.	567.	564.4	561.4	561.1	559.	558.6	554.2	557.7	557.3	31 30
18	561.1	559.2	570.5	562.3	561.3	561.3	559.	557.1	554.4	557.	557.6	37 30
24	561.	560.	558.8	563.	561.	561.5	559.8	556.5	554.5	557.2	559.5	43 30
30	560.2	560.	558.7	562.	560.9	560.1	559.5	556.5	554.4	556.5	558.4	49 30
36	560.	560.7	559.1	563.	560.5	560.6	559.2	557.	554.7	556.7	558.3	55 30
42	560.7	560.4	558.4	562.6	560.6	560.1	558.8	557.	555.5	556.4	558.8	1 30
48	560.	560.3	558.8	562.2	560.4	560.4	558.5	558.5	556.9	557.4	558.8	7 30
54	559.5	560.4	562.2	561.2	560.6	561.1	557.1	559.	557.4	558.2	558.9	13 30

Göttingen time.	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i> 0	559.5	559.5	561.4	563.4	569.	565.5	557.8	552.6	548.5	548.3	553.5	555.	<i>m.</i> 19 30
6	559.7	559.1	562.4	563.1	568.7	564.6	557.2	552.7	548.4	547.7	553.8	554.7	25 30
12	558.1	559.4	562.9	562.7	567.4	564.	556.7	551.5	549.	549.	554.5	556.	31 30
18	568.3	558.9	563.3	563.8	567.1	563.7	557.1	550.7	548.2	549.1	554.5	556.	37 30
24	562.3	559.7	562.7	565.1	565.	563.	556.7	550.5	548.2	549.6	553.9	557.	43 30
30	561.7	560.4	561.	565.	565.	562.	555.1	551.3	548.7	552.	555.	557.2	49 30
36	559.	560.	561.5	566.6	565.2	561.	554.7	550.2	547.6	552.5	553.3	557.1	55 30
42	558.	561.	561.5	568.5	565.2	560.1	553.8	549.4	548.	552.3	554.2	557.5	1 30
48	558.4	562.2	560.8	568.8	565.5	559.5	553.7	549.3	547.8	552.9	554.2	558.2	7 30
54	558.3	563.	562.5	568.7	566.1	563.4	553.	549.	548.2	553.5	554.7	558.5	13 30

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

Октябрь 19, 20.]

[illegible]

Göttingen time...	h. 23 16	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time.
m.													m. 21 30
2	783.5	781.	782.	785.7	787.9	792.9	789.3	796.8	795.5	790.	789.7	786.4	.....
8	782.2	781.4	782.9	784.4	789.3	791.9	789.5	796.3	790.8	789.7	789.	788.4	.....
14	779.5	779.	783.4	786.7	780.2	792.2	791.	796.3	791.7	791.2	787.3	788.7	.....
20	783.	778.4	783.	787.	789.1	792.4	790.5	794.2	791.2	791.5	786.1	785.3	.....
26	782.1	782.7	783.7	787.	787.3	788.6	792.5	797.	791.3	790.4	786.3	787.5	.....
32	780.7	782.1	784.2	787.5	791.	794.3	791.1	795.4	793.2	790.2	789.5	787.1	.....
38	782.7	780.3	784.	787.7	788.4	794.	793.2	796.1	791.1	791.5	787.5	785.4	.....
44	781.3	780.4	783.5	788.	791.2	794.2	795.7	796.3	789.5	788.3	786.8	785.4	.....
50	782.8	783.	784.	786.	789.6	794.1	795.9	793.5	789.5	786.5	787.6	785.5	.....
56	782.4	779.5	785.5	788.8	794.	792.1	796.5	795.5	790.2	788.3	785.5	784.7	.....
Thermometer...	61.1	62.	62.3	62.3	62.3	62.7	62.9	62.9	62.1	62.	62.2	61.5	.....Thermometer.
Göttingen time...	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time.
m.													m. 21 30
2	782.4	767.4	771.5	773.1	776.5	782.5	781.1	782.2	780.4	782.5	784.	779.5	.....
8	782.2	770.	768.2	775.6	781.3	782.2	780.6	785.1	779.6	781.2	782.3	778.	.....
14	780.6	770.	767.9	772.	782.6	781.5	780.3	785.4	778.	780.3	783.5	778.7	.....
20	779.6	775.1	767.9	768.2	781.4	781.5	780.	783.5	780.	782.6	780.9	780.7	.....
26	778.3	772.1	769.2	770.9	783.3	779.4	779.6	787.1	780.8	782.5	782.1	778.5	.....
32	777.3	774.9	770.7	772.2	782.	777.6	780.	784.2	782.7	785.2	783.7	779.6	.....
38	778.2	771.5	767.7	778.7	785.8	780.1	777.3	780.5	782.	781.8	783.2	782.	.....
44	773.8	767.5	769.	775.2	784.2	779.3	782.4	781.	781.2	786.6	780.3	783.	.....
50	771.2	768.7	770.5	775.1	784.1	779.	780.	779.3	781.6	783.5	780.4	782.2	.....
56	772.7	768.	769.5	778.1	783.7	780.4	781.3	782.2	780.5	784.6	782.	785.1	.....
Thermometer...	61.4	61.9	61.7	62.	61.8	60.9	61.	62.5	63.5	64.	64.2	64.6	.....Thermometer.

[1842.

MAGNETIC TERM DAY.—DECLINATION MAGNETOMETER.

December 21, 32.]

Göttingen time...	<i>h.</i> 22 16	<i>h.</i> 23 17	<i>h.</i> 0 18	<i>h.</i> 1 19	<i>h.</i> 2 20	<i>h.</i> 3 21	<i>h.</i> 4 22	<i>h.</i> 5 23	<i>h.</i> 6 0	<i>h.</i> 7 1	<i>h.</i> 8 2	<i>h.</i> 9 3	Observatory time.
<i>m.</i> 0	558.5	559.3	562.2	562.4	562.6	564.6	561.5	560.5	561.2	560.9	560.2	557.2	<i>m.</i> 19 30
6	559.1	559.	561.8	563.	562.5	564.9	562.	560.5	560.	561.3	558.5	560.8	25 30
12	558.4	559.	561.7	563.3	562.4	564.	562.5	560.	560.6	560.8	557.	563.6	31 30
18	559.	559.5	562.	563.2	562.4	564.2	561.3	559.	560.2	561.	556.5	564.	37 30
24	559.	558.7	562.7	563.	563.	564.7	560.	558.8	560.7	559.8	553.1	565.5	43 30
30	559.5	559.7	561.5	564.	562.7	562.5	559.1	558.7	561.	560.9	552.5	565.8	49 30
36	559.5	559.9	562.	562.7	563.7	562.5	560.1	560.3	560.1	560.5	551.3	565.7	55 30
42	559.	560.5	562.	563.	564.7	561.7	561.1	561.7	560.5	560.8	552.3	566.5	1 30
48	559.	562.	561.5	563.	567.	561.	560.	562.5	561.1	561.1	554.2	567.3	7 30
54	559.	561.	563.	563.	566.	562.	560.1	561.3	561.1	560.7	556.4	567.6	13 30

Göttingen time...	<i>h.</i> 10 4	<i>h.</i> 11 5	<i>h.</i> 12 6	<i>h.</i> 13 7	<i>h.</i> 14 8	<i>h.</i> 15 9	<i>h.</i> 16 10	<i>h.</i> 17 11	<i>h.</i> 18 12	<i>h.</i> 19 13	<i>h.</i> 20 14	<i>h.</i> 21 15	Observatory time.
<i>m.</i> 0	566.9	564.6	563.4	563.4	565.8	567.1	562.5	555.4	556.5	555.9	556.5	557.2	<i>m.</i> 19 30
6	565.4	564.1	564.	564.2	566.	566.2	563.3	555.2	555.2	555.2	556.1	557.7	25 30
12	564.7	564.2	563.8	564.7	566.4	566.4	561.4	555.5	555.7	556.	556.6	558.4	31 30
18	564.7	564.2	564.1	564.8	566.5	566.7	561.3	555.6	555.2	554.7	555.7	558.2	37 30
24	564.6	564.	564.3	564.9	566.3	565.5	560.4	555.3	554.5	554.7	556.2	558.6	43 30
30	565.	564.	563.6	564.9	566.7	565.	559.9	555.6	554.9	556.	557.2	558.6	49 30
36	565.	563.6	563.5	565.3	566.6	565.3	559.5	556.	556.2	555.	556.5	558.6	55 30
42	565.	564.2	563.7	565.6	566.5	565.5	558.3	556.4	555.9	554.4	556.7	559.1	1 30
48	565.	564.	563.7	566.	567.	565.6	557.6	555.6	555.6	555.5	557.	559.5	7 30
54	564.9	563.	563.9	566.6	567.	563.8	556.2	555.	555.5	556.5	557.7	560.6	13 30

[1843.

MAGNETIC TERM DAY.—VERTICAL FORCE MAGNETOMETER.

December 21, 22.]

Göttingen time...	h. 22 16	h. 23 17	h. 0 18	h. 1 19	h. 2 20	h. 3 21	h. 4 22	h. 5 23	h. 6 0	h. 7 1	h. 8 2	h. 9 3	Observatory time.
m.													m. s.
4	675.	668.4	667.2	671.	678.7	687.	686.	683.1	682.7	682.6	681.1	680.9	.....23 30
10	674.	668.	667.2	672.	679.	688.	685.	683.3	682.8	684.	680.8	681.1	.....29 30
16	673.7	667.9	668.	672.7	680.	688.7	685.	682.9	682.9	682.9	681.	680.4	.....35 30
22	672.3	667.	668.7	673.	680.7	689.	684.3	683.	682.9	683.1	680.2	680.3	.....41 30
28	672.	667.	669.	674.	681.5	689.	684.	683.	683.	683.1	680.5	678.7	.....47 30
34	671.	667.	668.5	674.7	683.2	688.6	683.7	682.	683.	683.	680.1	678.2	.....53 30
40	670.5	667.	669.	676.	683.9	688.	683.7	682.6	682.6	682.6	680.5	677.1	.....59 30
46	670.	667.	669.	676.	684.5	687.8	683.8	682.9	682.9	682.5	680.1	676.5	.....5 30
52	669.9	667.	670.	676.5	685.5	686.2	683.4	683.	682.6	682.	681.1	676.1	.....11 30
58	669.	667.	670.5	677.5	686.	686.3	683.3	683.	682.5	682.1	680.9	675.8	.....17 30
Thermometer...	62.	61.9	62.2	62.9	63.5	64.3	64.2	64.2	64.3	63.7	63.2	62.7	.... Thermometer.
Göttingen time...	h. 10 4	h. 11 5	h. 12 6	h. 13 7	h. 14 8	h. 15 9	h. 16 10	h. 17 11	h. 18 12	h. 19 13	h. 20 14	h. 21 15	Observatory time.
m.													m. s.
4	674.6	675.8	677.	674.9	669.	658.7	651.1	642.2	646.3	665.3	673.3	670.6	.....23 30
10	673.9	676.	677.	674.7	667.1	657.9	651.	643.9	647.3	667.2	673.5	670.3	.....29 30
16	673.9	675.9	676.5	674.	666.	657.	650.	641.1	650.	669.	673.8	669.3	.....35 30
22	674.	676.2	676.2	674.	665.	655.8	648.7	640.6	651.5	670.8	674.	669.4	.....41 30
28	674.3	676.3	676.3	674.	665.	655.1	647.8	641.1	653.7	671.	673.5	668.7	.....47 30
34	675.	675.3	675.8	673.9	663.4	654.2	647.3	641.9	655.5	672.1	673.4	668.6	.....53 30
40	675.	676.7	674.8	672.9	662.4	653.7	645.8	643.3	657.2	672.3	673.5	668.7	.....59 30
46	675.1	677.	675.6	671.7	661.9	652.8	644.7	643.6	659.	672.6	671.7	668.9	.....5 30
52	675.3	677.	675.5	671.1	661.9	652.2	643.8	643.5	661.2	673.	671.	669.	.....11 30
58	675.4	677.	675.2	670.	660.1	651.4	643.	645.1	663.4	673.2	671.1	669.4	.....17 30
Thermometer...	62.4	62.4	62.3	61.7	60.5	60.	59.7	60.3	62.	62.8	61.5	61.	.... Thermometer.

MAGNETIC OBSERVATORY,

AT THE

GIRARD COLLEGE, PHILADELPHIA.

EXTRAORDINARY MAGNETIC OBSERVATIONS.

MAXIMA AND MINIMA,

FROM JANUARY TO JUNE, 1842.

GENERAL NOTE.

The observations of the preceding eighteen months having shown distinct periods of maximum and minimum in the declination, vertical and horizontal forces, respectively, an attempt was made to ascertain the times of maximum and minimum more closely, by observations at short intervals, at periods of the day including the above phenomena. The observations thus made are recorded in the following pages, under the titles of Maxima and Minima, whether they separately indicate or not the periods sought.

JANUARY.]

FIRST MAXIMUM OF DECLINATION.

[1842.]

	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Göttingen time.....	6 00	6 06	6 12	6 18	6 24	6 30	6 36	6 42	6 48	6 54	7 00
Observatory time.....	0 19½	0 25½	0 31½	0 37½	0 43½	0 49½	0 55½	1 01½	1 07½	1 13½	1 19½
Jan. 1	561.	560.7	559.8	559.2	559.3	558.	558.	558.	557.9	559.1	559.1
3	562.8	563.1	562.3	562.2	562.8	562.	562.	561.8	562.2	561.8	561.8
4	547.	547.7	546.	547.7	547.1	547.3	546.8	546.3	546.1	546.3	546.3
5	556.	555.7	555.1	555.	554.1	553.2	552.9	553.	552.6	553.1	553.1
6	564.1	563.2	563.4	562.8	562.6	562.9	562.1	562.1	562.7	563.9	563.9
7	572.6	575.5	573.2	570.	569.	569.1	573.4	563.	569.7	572.2	572.2
8	569.7	569.8	569.8	569.1	570.	570.1	570.	570.	570.	570.	570.
10	568.9	568.9	568.9	568.9	568.8	569.	569.	569.	569.	569.	569.
11	572.9	574.5	572.6	572.8	571.8	572.7	572.3	573.6	573.1	573.2	573.2
12	572.8	572.9	572.8	573.	574.2	575.2	577.	578.3	578.	578.	578.
13	567.1	567.3	567.1	566.8	566.6	566.7	566.8	566.5	566.5	566.6	566.6
14	565.5	566.1	565.6	566.	566.1	566.2	565.	565.1	565.1	565.2	565.2
15	568.9	568.8	568.9	568.5	568.6	568.4	568.2	568.2	568.6	568.7	568.7
17	567.9	567.9	567.7	567.6	567.6	567.5	567.4	566.8	566.4	566.7	566.7
18	564.5	564.5	565.	566.7	569.6	569.6	569.6	568.8	568.4	568.7	568.7
19	572.	571.1	572.	572.	572.5	572.5	569.4	568.7	568.1	568.2	568.2
20	569.6	570.2	570.1	569.6	569.4	569.3	569.4	571.5	571.8	572.2	572.2
21	568.4	567.9	568.6	569.7	569.8	570.3	569.7	569.5	569.5	569.5	569.5
22	566.9	566.8	566.8	567.	567.1	567.6	566.9	567.	567.3	566.	566.
24	568.2	568.	567.3	568.4	567.6	568.5	570.4	571.9	573.	574.5	574.5
25	573.4	573.5	573.6	573.3	572.	572.6	573.7	574.	573.8	572.2	572.2
26	566.9	566.5	566.	566.6	567.	567.3	567.4	566.6	567.1	566.6	566.6
27	571.2	571.2	570.4	571.1	570.3	570.1	569.4	569.2	568.5	568.2	568.2
28	566.1	566.6	565.8	565.3	565.6	566.5	565.6	565.3	565.3	565.5	565.5
29	569.4	569.3	568.6	568.5	568.6	566.7	567.5	568.2	568.8	568.2	568.2
31	563.1	561.4	562.1	561.9	559.7	558.9	558.5	559.2	561.5	564.3	564.3
Means.....	563.7	563.7	563.4	563.1	563.4	563.	562.9	563.	563.4	563.7	563.7

[1842.

FIRST MAXIMUM OF DECLINATION—Continued.

JANUARY.]

	<i>h. m.</i> 7 00 1 19½	<i>h. m.</i> 7 06 1 25½	<i>h. m.</i> 7 12 1 31½	<i>h. m.</i> 7 18 1 37½	<i>h. m.</i> 7 24 1 43½	<i>h. m.</i> 7 30 1 49½	<i>h. m.</i> 7 36 1 55½	<i>h. m.</i> 7 42 2 01½	<i>h. m.</i> 7 48 2 07½	<i>h. m.</i> 7 54 2 13½
Göttingen time.....										
Observatory time.....										
Jan. 1.....	559.1	559.1	560.1	560.5	560.9	560.3	559.1	559.	559.	559.1
3.....	563.4	563.1	563.9	562.8	562.3	562.1	562.5	561.3	561.2	561.2
4.....	549.8	546.6	547.5	548.8	548.3	548.5	549.4	549.4	549.4	549.4
5.....	563.3	553.1	553.1	553.4	555.	554.2	554.4	554.6	555.9	555.8
6.....	556.	555.6	555.6	556.	556.2	555.5	555.7	556.1	556.3	556.7
7.....	574.2	569.2	573.3	573.9	573.3	574.5	572.4	568.8	567.7	569.1
8.....	570.	569.6	569.9	570.	570.3	570.1	570.	569.5	569.5	569.9
10.....	568.8	568.6	568.7	568.5	568.3	568.5	568.7	568.4	568.5	568.6
11.....	573.5	573.9	574.	574.1	574.8	576.3	577.1	577.9	576.5	576.9
12.....	576.6	574.4	573.3	472.8	571.9	569.1	569.	569.4	570.	570.9
13.....	566.6	566.6	566.7	565.5	566.9	566.5	566.6	566.2	566.3	566.1
14.....	564.4	565.6	565.6	565.	565.3	565.5	565.3	566.	565.9	566.
15.....	568.4	568.3	568.2	568.1	568.3	568.2	568.3	569.	568.1	567.9
17.....	566.4	566.4	566.1	567.4	567.6	566.8	566.9	566.7	566.8	567.3
18.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19.....	567.8	567.3	566.9	567.4	567.8	567.8	566.8	567.5	567.7	565.5
20.....	571.6	571.2	570.5	569.1	568.6	568.3	567.7	568.4	569.5	569.
21.....	569.6	570.	570.	569.7	569.5	568.9	570.6	570.2	570.2	571.
22.....	567.	566.7	566.4	566.2	565.4	566.	568.2	567.1	567.7	567.9
24.....	574.9	573.9	574.5	574.	573.2	572.9	573.6	574.2	573.8	573.2
25.....	572.2	571.5	572.6	571.8	570.2	568.8	570.7	570.8	570.8	569.6
26.....	566.2	567.2	566.4	565.7	567.1	567.1	562.9	566.8	563.3	566.5
27.....	568.1	568.	567.5	567.	567.	566.9	566.9	566.8	567.1	567.1
28.....	565.9	565.5	566.5	565.6	565.6	566.3	565.4	566.1	566.3	566.
29.....	568.6	568.2	568.2	568.8	563.	566.	565.3	569.3	570.	571.1
31.....	562.9	564.3	561.6	563.7	564.2	562.9	562.8	563.1	562.3	562.5
Means.....	563.7	563.3	563.3	563.2	563.3	563.2	563.2	563.5	563.3	563.5

JANUARY.]

SECOND MAXIMUM OF DECLINATION.

[1843.]

	h. m. 18 00 13 19½	h. m. 18 06 12 25½	h. m. 18 12 12 31½	h. m. 18 18 12 37½	h. m. 18 24 12 43½	h. m. 18 30 12 49½	h. m. 18 36 12 55½	h. m. 18 42 13 01½	h. m. 18 48 13 07½	h. m. 18 54 13 13½
Göttingen time.....										
Observatory time.....										
Jan. 1.....	545.8	544.8	544.7	544.5	544.	546.3	546.5	545.1	547.3	548.8
2.....	542.1	540.5	541.2	540.8	541.8	541.6	543.6	543.3	543.2	544.1
4.....	553.2	552.7	553.5	552.8	553.2	552.5	551.6	551.2	552.2	552.6
5.....	544.8	543.2	545.1	544.7	544.6	544.2	544.6	544.7	545.4	544.9
6.....	550.5	550.7	549.7	549.9	550.	550.4	551.7	552.1	551.6	550.
7.....	566.7	564.6	565.3	564.5	565.4	564.7	564.6	564.6	563.5	563.5
8.....	562.5	562.5	563.6	562.4	560.9	561.	560.3	560.5	560.7	561.7
10.....	559.	559.2	559.3	558.8	558.4	559.8	559.9	560.	560.1	560.9
11.....	563.	563.1	562.3	561.2	559.9	558.	559.2	560.2	560.5	561.9
12.....	563.3	562.5	561.8	561.4	561.	560.	560.	560.	560.4	560.6
13.....	558.1	557.2	557.	557.	556.7	556.4	556.2	555.7	555.6	555.2
14.....	560.2	559.8	.....	559.9	560.3	559.5	560.	560.	560.2	560.5
15.....	559.5	559.4	559.1	558.7	559.6	560.	560.1	559.8	559.6	560.6
17.....	561.5	559.8	558.5	558.3	558.	557.6	558.	557.8	557.5	558.9
18.....	564.2	563.5	562.5	564.5	563.4	563.2	561.8	561.	561.2	561.3
19.....	568.7	568.	568.	568.1	568.	568.6	569.4	569.2	569.7	560.
20.....	561.4	560.8	560.4	560.8	560.5	560.	569.7	569.9	560.3	560.3
21.....	558.9	559.2	559.7	559.4	558.6	558.3	557.6	556.9	556.6	556.4
22.....	560.	559.9	559.4	559.3	559.3	559.4	559.5	559.4	559.5	560.
24.....	557.7	556.1	556.	.....	556.2	556.9	557.6	558.1	558.6	558.6
25.....	565.	563.2	563.	562.7	562.8	561.8	562.2	562.1	562.5	563.4
26.....	564.8	564.	563.6	563.8	563.6	561.9	564.	564.	564.2	563.5
27.....	564.7	563.	561.9	561.5	562.	561.8	561.5	561.	561.5	561.
28.....	568.	566.	563.3	562.4	562.2	561.	563.4	560.5	560.3	559.8
29.....	563.	563.1	562.6	562.8	563.1	563.7	563.4	563.2	563.4	563.7
31.....	555.6	554.7	553.8	551.1	553.8	554.4	553.6	555.2	555.	554.7
Means.....	556.5	555.1	554.7	554.5	554.5	554.4	554.5	554.4	554.6	554.8

JANUARY.]

FIRST MINIMUM OF DECLINATION.

[1842.]

[97]

603

	<i>h. m.</i> 2 00 20 19½	<i>h. m.</i> 2 06 20 25½	<i>h. m.</i> 2 12 20 31½	<i>h. m.</i> 2 18 20 37½	<i>h. m.</i> 2 24 20 43½	<i>h. m.</i> 2 30 20 49½	<i>h. m.</i> 2 36 20 55½	<i>h. m.</i> 2 42 21 01½	<i>h. m.</i> 2 48 21 07½	<i>h. m.</i> 2 54 21 13½
Göttingen time.....										
Observatory time.....										
Jan. 1.....	564.2	564.8	565.8	565.	565.3	565.5	566.4	566.5	566.	565.5
3.....	552.7	552.7	553.2	553.8	553.1	554.	554.5	554.	553.9	553.2
4.....	559.6	559.6	561.3	560.5	560.7	561.	561.2	561.5	560.6	560.
5.....	561.9	562.7	562.5	561.4	560.4	560.4	560.4	561.	560.6	560.6
6.....	571.4	571.3	571.3	570.	570.	569.4	568.7	568.9	569.	572.6
7.....	572.7	572.1	571.5	571.6	571.8	571.4	571.4	571.6	568.8	570.8
8.....	573.4	573.5	573.5	573.8	573.9	573.9	573.9	574.4	573.9	573.9
9.....	570.	569.5	570.	569.9	570.5	571.2	570.8	571.5	570.8	570.6
10.....	580.5	583.2	582.2	581.3	577.4	574.4	574.5	573.4	573.4	573.5
11.....	570.1	570.5	570.	569.6	569.	569.2	569.5	569.9	569.1	568.9
12.....	570.9	571.1	571.4	572.	573.	572.7	571.9	572.1	571.7	572.
13.....	573.2	574.8	576.5	579.2	578.	578.2	578.	575.1	575.	571.9
14.....	570.	573.9	573.1	562.	562.1	562.8	566.9	563.8	559.2	560.1
15.....	570.	570.3	570.5	570.5	570.	570.4	569.4	570.3	570.2	570.6
16.....	601.4	600.2	590.3	597.7	582.9	584.8	590.4	574.3	571.8	572.
17.....	567.6	568.8	568.7	568.6	567.7	568.	568.7	569.5	569.4	569.6
18.....	570.	571.3	570.7	571.7	571.	571.6	570.5	569.6	570.5	569.4
19.....	570.	571.	569.2	569.8	568.	569.	571.6	581.6	581.6	589.9
20.....	570.	574.	574.4	574.5	573.5	573.5	574.4	574.6	573.6	574.8
21.....	570.9	570.	570.5	570.2	571.	570.7	571.7	571.6	570.	570.9
22.....	567.	569.9	570.	569.3	569.3	569.5	569.6	569.6	569.5	569.4
23.....	567.	567.	567.1	567.	567.4	567.2	568.1	570.	567.4	567.8
24.....	566.9	567.	567.7	567.9	568.7	567.2	567.	567.9	568.6	569.
25.....	578.4	576.8	576.4	571.9	571.1	571.1	570.2	569.6	569.3	568.
26.....	584.	583.6	583.5	583.3	584.1	584.6	584.6	585.5	580.3	583.5
27.....	582.8	584.2	586.6	583.9	585.7	584.8	584.1	584.4	584.7	586.1
28.....	588.5	587.8	587.6	587.4	586.4	586.4	586.5	586.3	585.7	586.3
29.....										
30.....										
31.....										
Means.....	568.5	567.8	567.6	567.4	566.4	566.4	566.5	566.3	565.7	566.3

[1842.]

FIRST MINIMUM OF DECLINATION—Continued.

JANUARY.]

	<i>h. m.</i> 3 00 21 19½	<i>h. m.</i> 3 06 21 26½	<i>h. m.</i> 3 12 21 31½	<i>h. m.</i> 3 18 21 37½	<i>h. m.</i> 3 24 21 43½	<i>h. m.</i> 3 30 21 49½	<i>h. m.</i> 3 36 21 55½	<i>h. m.</i> 3 42 22 01½	<i>h. m.</i> 3 48 22 07½	<i>h. m.</i> 3 54 22 13½
Göttingen time										
Observatory time.....										
77 Jan. 1	564.9	565.8	566.9	568.5	569.7	568.5	567.5	565.7	568.1	567.6
3	564.	563.7	564.6	564.9	554.	568.	562.6	561.6	566.3	562.7
4	560.	560.9	560.5	562.5	562.4	561.3	567.3	.....	.....	.....
5	561.	560.8	560.9	569.8	569.5	568.9	567.7	567.4	567.7	568.3
6	577.	579.	577.	.....	567.9	568.4	565.6	567.9	570.7	573.9
7	570.8	570.9	570.8	576.8	570.5	570.1	570.4	570.5	570.6	571.1
8	574.3	574.1	574.2	573.8	573.4	573.	572.4	572.3	572.3	572.4
10	570.7	570.6	569.7	570.1	569.9	570.5	569.4	567.9	567.1	567.9
11	576.5	574.3	570.5	570.	568.5	568.3	568.1	569.1	570.4	569.1
12	568.9	569.	569.1	570.2	570.9	571.	571.3	571.3	569.8	570.3
13	571.4	571.	572.2	571.2	572.2	572.5.	572.6	571.8	571.4	571.
14	573.5	574.	573.9	572.3	570.8	571.	570.	569.5	569.6	570.1
15 .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	570.6	570.8	573.8	577.7	577.6	575.6	576.7	575.9	574.6	574.3
18	584.5	582.2	587.1	583.1	577.7	581.8	578.6	578.4	581.9	582.8
19	588.3	588.6	588.6	586.5	586.8	589.3	589.3	589.8	570.3	571.1
20	589.6	571.6	571.	571.2	571.3	589.4	589.5	588.7	589.4	589.3
21	597.8	593.5	586.1	581.3	570.7	583.4	584.5	589.	572.	572.
22	574.6	574.7	574.5	574.	572.7	573.5	573.	572.7	572.7	572.4
23	571.5	571.6	571.4	570.8	570.7	570.7	569.1	569.1	568.5	568.
25	568.9	569.6	569.3	570.2	569.3	570.2	570.5	571.9	570.4	570.8
26	567.5	567.7	568.	567.7	568.5	568.7	568.6	569.3	568.5	568.8
27	568.3	569.1	569.1	568.7	569.3	572.8	573.	575.9	575.5	570.1
28	568.1	568.9	569.1	568.8	569.6	569.6	570.3	572.4	572.4	573.3
29	565.1	564.2	563.8	564.2	565.7	565.2	565.8	565.4	566.1	567.3
31	563.5	563.3	563.9	563.3	566.8	567.6	568.	567.	566.1	566.
Means	567.7	567.8	567.6	567.	566.3	568.1	566.8	566.5	567.	567.

[JANUARY.]

SECOND MINIMUM OF DECLINATION.

[1842

[97]

610

	h. m. 13 00 7 19½	h. m. 13 06 7 25½	h. m. 13 12 7 31½	h. m. 13 18 7 37½	h. m. 13 24 7 43½	h. m. 13 30 7 49½	h. m. 13 36 7 55½	h. m. 13 42 8 01½	h. m. 13 48 8 07½	h. m. 13 54 8 13½
Göttingen time.....										
Observatory time.....										
Jan. 1.....	535.5	533.3	534.1	535.5	532.1	533.4	537.7	540.7	543.9	547.6
3.....	558.8	561.2	560.2	560.3	560.4	560.7	561.6	563.	563.7	563.3
4.....	559.9	559.5	559.	558.9	559.9	559.5	560.	560.1	556.2	556.5
5.....	554.6	554.6	554.3	555.5	556.1	557.2	559.2	560.9	560.4	561.
6.....	560.	560.1	560.1	560.9	561.6	561.8	563.2	563.4	563.5	563.
7.....	574.1	574.5	574.8	574.4	573.	573.1	572.7	573.8	575.3	573.4
8.....	573.6	574.	574.2	575.1	576.	576.4	577.	578.	578.2	578.3
10.....	573.4	573.8	573.7	573.4	573.9	573.7	573.3	573.5	573.6	573.8
11.....	572.5	572.7	574.4	574.5	573.7	574.7	575.1	575.6	576.5	578.5
12.....	575.2	574.8	575.1	575.1	574.1	574.1	573.6	573.8	573.4	572.6
13.....	572.3	572.4	573.6	573.8	573.5	573.3	574.5	575.6	576.	575.2
14.....	571.4	572.4	571.6	572.	571.4	572.4	572.7	572.8	573.5	572.6
15.....	574.6	575.8	576.5	575.6	575.9	575.7	577.	577.	576.6	576.3
17.....	573.5	574.	573.9	574.	573.	573.9	576.1	576.	576.4	576.3
18.....	573.3	573.8	576.1	573.	575.5	576.1	570.9	573.5	574.4	575.4
19.....	574.3	574.3	575.2	575.2	575.4	575.2	576.2	576.9	577.8	578.2
20.....	574.5	574.5	574.3	575.1	574.6	574.2	575.3	575.6	576.1	575.9
21.....	571.	571.9	572.3	571.7	571.9	572.	572.2	571.8	575.2	574.3
22.....	569.2	569.2	569.8	569.4	569.8	570.4	571.6	573.5	573.7	571.6
24.....	573.	571.5	572.	571.	571.	570.8	570.3	572.	572.2	572.4
25.....	570.	570.	570.	570.	571.2	571.3	571.2	571.6	571.5	571.9
26.....	575.5	574.7	573.1	573.3	573.6	573.1	573.6	573.9	574.1	576.1
27.....	570.7	571.6	571.7	571.5	572.1	572.7	573.5	573.2	573.7	573.7
28.....	573.8	573.3	573.	572.6	573.3	573.5	574.1	573.9	573.8	573.6
31.....	566.8	567.4	566.6	566.5	566.7	568.6	567.6	569.	568.7	566.5
Means.....	566.1	566.3	566.5	566.4	566.5	567.1	567.4	568.1	568.4	568.5

[1862.]

MAXIMUM OF VERTICAL FORCE.

JANUARY.]

	A. m. 23 04 16 33½	Therm., Feb.	A. m. 23 10 16 29½	A. m. 23 16 16 35½	A. m. 23 22 16 41½	A. m. 23 28 16 47½	A. m. 23 34 16 53½	Therm., Feb.	A. m. 23 40 16 59½	A. m. 23 46 17 05½	A. m. 23 52 17 11½	A. m. 23 58 17 17½
Göttingen time.....	660.5	71.5	668.	676.9	680.6	683.3	686.7	70.5	688.5	690.	692.3	692.
Observatory time.....	672.5	71.9	676.2	680.1	687.	692.5	695.	71.9	698.	701.5	704.2	703.8
Jan. 1.....	712.3	71.3	718.	715.2	716.7	718.9	717.6	71.8	717.6	717.8	720.	720.9
2.....	649.	66.3	653.7	650.2	648.8	649.	648.4	66.3	646.3	646.6	647.7	647.7
3.....	.....	62.	583.1	582.	581.3	581.1	579.4	62.	579.	577.5	577.8	576.6
4.....	670.9	67.7	670.1	669.2	668.8	668.5	667.6	67.8	668.6	668.3	668.1	667.6
5.....	773.4	76.	773.7	773.4	772.4	773.	773.3	74.	772.	771.3	770.7	770.4
6.....	772.6	75.	772.7	772.5	772.4	771.7	772.6	75.	772.2	772.2	770.9	771.5
7.....	796.6	74.8	811.5	801.1	790.	792.5	791.5	74.2	786.7	785.7	784.5	783.3
8.....	768.3	74.7	768.7	768.7	761.2	761.5	759.5	73.3	758.1	757.8	757.1	756.5
9.....	677.3	73.	684.3	680.2	685.7	689.1	704.6	71.	706.6	709.5	711.5	712.8
10.....	699.	70.	699.2	698.9	697.4	696.9	697.4	69.3	696.1	695.	696.3	694.6
11.....	778.	74.9	778.2	778.8	779.	780.5	778.3	74.	777.5	776.9	774.	774.6
12.....	734.2	73.	734.1	733.9	734.	732.5	732.4	72.	733.4	733.4	732.6	733.7
13.....	763.8	73.	766.1	764.5	761.7	763.7	764.3	73.	766.3	764.	765.9	765.4
14.....	770.6	76.	771.3	772.1	773.3	775.7	776.2	75.3	777.	777.	776.6	776.6
15.....	745.1	73.6	740.6	740.7	741.	743.4	742.5	73.5	741.9	742.1	742.4	743.6
16.....	597.5	60.2	540.7	544.3	547.9	569.5	567.6	63.5	562.3	565.7	572.4	577.
17.....	774.7	75.	778.7	779.7	780.4	780.	783.8	74.3	783.3	785.3	783.	782.5
18.....	651.3	64.2	651.	650.	648.8	647.3	646.4	63.8	645.	644.6	644.8	644.5
19.....	681.3	61.9	630.	629.8	629.8	628.5	628.3	61.9	627.6	628.6	628.1	627.8
20.....	745.	70.6	745.	745.2	746.3	746.1	746.3	70.3	746.7	746.5	746.3	747.3
21.....	666.3	67.	666.7	665.4	664.3	664.3	664.3	66.	662.7	661.5	662.5	660.4
22.....	683.7	67.	684.8	685.8	686.6	687.5	687.5	66.5	687.3	687.	687.	686.9
23.....	749.3	73.	750.2	751.7	752.7	746.2	745.	72.	754.8	754.3	754.7	756.3
24.....	769.6	72.4	790.2	793.	793.5	793.1	795.1	72.2	796.6	797.	797.	796.1
Means.....	716.1	70.5	712.8	713.2	714.	714.4	715.8	70.2	715.5	715.6	716.	716.9

JANUARY.]

MINIMUM OF VERTICAL FORCE.

[1842.]

	h. m. 12 34 6 53½	Therm., Fah.	h. m. 12 40 6 59½	h. m. 12 46 7 06½	h. m. 12 52 7 11½	h. m. 12 58 7 17½	h. m. 13 04 7 23½	Therm., Fah.	h. m. 13 10 7 29½	h. m. 13 16 7 35½	h. m. 13 22 7 41½	h. m. 13 28 7 47½
Getting time.....	572.8	63.	572.3	572.3	573.1	573.7	574.3	63.5	576.	577.9	579.9	580.8
Observatory time.....	287.3	45.6	292.4	293.1	308.1	315.7	326.1	50.	332.2	340.5	348.6	357.
1.....	686.5	67.	686.5	685.2	686.5	686.1	680.8	67.8	680.7	682.9	684.3	685.3
2.....	.....	66.	686.5	684.	685.8	685.5	630.5	63.5	638.4	639.8	637.8	637.8
3.....	529.3	58.	529.9	528.4	525.8	525.7	525.2	58.	523.9	523.	522.2	520.5
4.....	653.7	68.	657.	657.3	657.4	656.1	657.8	68.	658.8	660.4	661.	662.1
5.....	672.	69.	677.2	677.5	675.9	677.	676.7	68.	674.2	673.7	673.9	672.9
6.....	822.	77.9	822.3	823.1	823.9	823.1	821.5	77.	820.9	816.5	815.7	814.6
7.....	768.9	75.3	768.7	769.3	770.5	772.	772.	76.	773.8	775.2	775.6	775.6
8.....	734.7	71.3	734.1	733.6	731.8	731.6	728.7	69.8	730.1	725.6	725.2	722.8
9.....	729.1	70.8	727.5	727.2	728.5	726.2	727.5	69.7	722.1	720.5	717.7	717.9
10.....	615.7	64.5	613.3	617.1	616.2	615.7	619.3	66.	621.6	621.6	621.2	624.6
11.....	666.3	67.8	667.	665.8	666.5	665.5	666.3	67.1	663.6	663.9	664.6	662.7
12.....	747.9	73.4	747.6	748.8	745.7	747.5	747.5	73.1	747.5	747.1	746.8	747.5
13.....	734.1	69.8	733.5	731.5	731.5	728.	725.7	69.8	724.6	723.	720.7	718.7
14.....	650.6	69.2	654.2	655.6	657.5	653.3	661.	70.	663.8	667.3	671.2	671.9
15.....	685.	68.8	680.	679.7	679.2	677.1	675.7	68.	675.7	676.	673.6	672.6
16.....	638.	60.5	641.5	636.6	635.2	633.5	632.3	62.	630.5	630.1	628.5	627.
17.....	658.6	67.5	663.6	668.2	669.	670.1	671.8	68.2	674.1	675.5	679.3	681.8
18.....	580.1	60.	582.9	584.3	586.7	590.2	591.	61.1	593.4	595.7	597.5	599.8
19.....	565.5	59.5	565.	565.9	569.5	568.1	566.3	59.3	570.6	572.2	573.4	573.4
20.....	681.9	63.3	680.9	681.9	680.5	683.5	683.8	63.5	685.7	685.5	688.6	688.3
21.....	787.2	73.	787.	782.8	783.6	783.9	782.9	71.6	783.2	782.2	780.6	778.2
22.....	669.	65.5	664.1	664.1	664.4	662.7	663.3	64.6	662.3	661.1	659.5	659.
23.....	620.3	60.	619.	613.7	609.6	608.4	601.9	59	599.1	598.4	594.9	592.5
24.....	794.7	73.3	795.9	797.4	801.2	803.9	810.8	73.8	805.7	811.	811.8	813.5
Means.....	680.4	68.4	659.9	660.	660.3	660.3	660.6	66.5	660.4	660.9	661.2	661.5
Reduced to 32° Fah....	194.7		195.4	195.2	195.2	194.9	194.9	195.	195.	195.7	196.3	196.8

JANUARY.]

MINIMUM OF VERTICAL FORCE—Continued.

[1842.]

Göttingen time.....	h. m. 13 34	Therm., Fah.	h. m. 13 40	h. m. 13 46	h. m. 13 52	h. m. 13 58	h. m. 14 04	Therm., Fah.	h. m. 14 10	h. m. 14 16	h. m. 14 22	h. m. 14 28	Therm., Fah.
Observatory time.....	h. m. 7 53½		h. m. 7 59½	h. m. 8 05½	h. m. 8 11½	h. m. 8 17½	h. m. 8 23½		h. m. 8 29½	h. m. 8 35½	h. m. 8 41½	h. m. 8 47½	
Jan. 1	583.4	64.	586.4	588.5	590.	592.4	594.1	64.5	.....	.....	.....	.....	.....
3	364.3	52.2	372.9	380.9	390.3	390.6	402.3	54.	.....	.....	.....	.....	.....
4	666.3	66.9	667.8	670.9	668.5	672.1	673.5	59.2	.....	.....	.....	.....	.....
5	628.9	66.2	629.5	630.6	630.8	632.1	632.9	66.	633.9	635.1	637.7	.....	66.7
6	519.5	57.	518.3	516.9	514.6	513.7	511.6	57.	511.	509.	508.5	507.	56.7
7	661.2	68.	662.1	661.2	664.5	663.9	664.3	67.8	663.7	663.2	662.4	662.4	67.6
8	670.8	66.7	671.1	668.5	667.2	666.	665.1	66.	663.7	662.2	661.2	661.7	65.5
10	813.1	76.1	812.9	811.7	812.8	810.8	810.2	75.9	.....	.....	.....	.....	.....
11	776.8	75.	776.6	774.1	777.5	778.3	780.7	75.	779.3	778.5	778.9	779.5	74.8
12	723.5	69.7	722.8	721.1	719.9	719.3	719.5	70.	718.4	717.3	716.5	716.1	70.7
13	715.1	68.5	713.5	709.8	710.7	707.	703.8	68.7	700.9	697.8	695.4	693.5	67.7
14	623.7	66.2	625.5	626.3	627.8	629.1	630.4	66.5	633.7	635.2	637.2	640.	67.2
15	661.5	66.5	661.6	660.	659.6	661.2	658.5	66.5	657.6	658.3	657.4	657.	67.3
17	747.3	72.8	747.	747.1	747.5	748.3	748.9	72.1	745.6	744.7	742.8	741.6	71.2
18	716.6	70.	716.5	714.7	712.6	712.7	714.4	70.6	714.8	714.5	714.8	715.9	71.5
19	675.	70.	675.9	677.9	680.7	683.8	681.5	70.2	683.3	685.7	686.6	688.9	70.3
20	671.1	67.	669.	666.5	665.3	664.2	662.6	66.7	661.9	660.5	659.8	658.8	66.9
21	636.3	61.5	624.6	624.1	622.8	622.3	621.7	61.2	620.9	618.6	616.5	616.5	61.2
22	633.3	63.5	636.3	636.4	630.1	628.3	624.6	62.4	627.9	618.6	616.5	616.5	61.2
23	601.8	61.6	603.8	604.8	608.5	609.3	611.9	62.4	614.3	616.	618.7	620.9	63.
24	571.8	59.1	572.5	572.5	572.7	572.	571.7	58.8	568.4	571.1	570.5	571.6	58.6
25	657.3	63.8	656.1	656.1	656.7	655.8	655.4	64.	654.6	654.7	654.2	654.4	63.8
26	775.6	71.	775.8	773.2	773.2	770.2	772.4	70.9	771.1	769.2	768.7	766.5	70.8
27	657.1	64.	656.3	654.1	654.3	655.	651.6	63.8	652.4	651.8	650.9	650.5	63.9
28	589.5	58.4	583.8	580.6	579.4	577.9	574.6	58.	571.7	569.8	568.	566.	57.6
29	816.4	74.	818.	820.8	821.4	822.8	823.2	74.	823.9	823.1	824.	824.4	78.7
31	661.3	66.4	661.9	661.5	662.3	662.4	662.7	66.5	670.1	669.8	672.2	671.2	66.6
Means.....	196.9		197.2	196.6	197.1	197.	197.		204.1	203.4	201.8	204.1	
Reduced to 32° Fah.....													

JANUARY.]

FIRST MAXIMUM OF HORIZONTAL FORCE.

[1849.]

Getting time..... Observatory time.....	A. m. 11 32 5 51½	Therm., Fah.	A. m. 11 38 5 57½	A. m. 11 44 6 03½	A. m. 11 50 6 09½	A. m. 11 56 6 15½	A. m. 12 02 6 21½	Therm., Fah.	A. m. 12 08 6 27½	A. m. 12 14 6 33½	A. m. 12 20 6 39½	A. m. 12 26 6 45½	Therm., Fah.
Jan. 1.....	539.	56.1	537.1	537.9	537.8	543.	550.7	56.1	564.	567.3	572.5	580.	56.
3.....	513.3	40.1	512.3	511.7	513.8	509.1	508.1	40.1	504.	504.4	504.4	504.4	41.
4.....	544.	60.7	542.6	543.2	545.7	550.1	551.7	60.6	545.1	545.8	542.7	545.4	60.4
5.....	544.3	57.4	542.1	542.7	544.7	547.1	547.7	57.4	550.9	549.7	551.9	555.4	57.4
6.....	536.2	53.	534.6	535.2	535.7	534.9	535.	52.9	533.1	533.2	533.2	531.7	52.8
7.....	568.	61.7	567.6	567.3	567.7	569.1	568.3	61.8	567.8	566.9	566.3	564.3	62.2
8.....	561.7	62.7	560.5	561.9	561.6	562.7	563.3	62.5	562.8	561.9	562.3	562.7	62.3
10.....	561.1	70.9	562.1	562.2	562.2	563.2	563.2	70.9	563.8	561.9	562.3	563.7	70.9
11.....	566.3	66.9	564.8	564.1	563.2	566.1	565.2	67.	564.9	564.5	565.3	566.9	67.1
12.....	564.	65.	561.9	564.	562.	561.8	566.9	64.8	562.3	564.1	563.7	559.	64.6
13.....	557.	64.4	557.9	556.3	557.7	557.5	557.1	64.2	555.8	555.6	553.6	555.3	64.
14.....	540.2	58.	540.6	540.2	539.	537.8	539.6	57.8	537.6	536.1	536.9	537.	56.
15.....	546.3	61.3	547.5	547.3	548.3	547.7	547.2	61.3	545.9	546.5	546.2	546.8	61.4
17.....	554.1	65.	554.8	558.5	558.5	558.2	558.2	65.2	557.	556.1	558.8	557.5	65.3
18.....	564.9	64.2	564.8	564.8	564.2	564.5	563.	64.1	566.8	569.8	571.7	575.3	64.
19.....	570.	61.8	569.5	567.9	569.6	568.7	570.	62.	569.6	568.	566.	568.8	62.3
20.....	567.5	64.5	567.7	569.	568.8	568.	569.3	64.5	568.4	570.	568.1	571.3	64.4
21.....	570.1	60.9	569.8	568.2	567.8	567.9	567.7	61.1	567.3	566.3	565.8	563.6	61.
22.....	534.6	58.	534.3	532.8	536.1	535.2	532.6	58.2	533.3	532.3	534.4	533.2	58.2
24.....	507.1	50.6	504.7	504.7	506.9	504.5	505.2	51.	505.3	504.6	507.	505.5	51.5
25.....	526.8	51.5	526.7	525.	525.	525.7	527.4	51.7	524.3	524.3	526.9	526.	52.3
26.....	541.5	58.4	543.	542.2	544.8	541.8	542.4	58.	542.3	542.2	542.8	542.5	58.3
27.....	552.	65.5	551.5	551.5	552.2	551.	553.	65.5	552.2	553.7	552.7	552.7	65.5
28.....	533.1	58.2	531.2	531.5	532.1	532.1	532.3	58.5	530.9	532.6	531.3	533.2	58.7
29.....	552.6	58.	553.3	556.7	554.3	552.	551.9	58.	553.4	551.4	552.2	551.7	58.
31.....	560.9	66.8	560.	558.7	559.9	558.5	558.7	66.7	558.9	558.9	558.7	559.2	66.8
Means.....	549.1	60.1	548.6	548.6	549.2	549.2	549.9	60.1	549.5	549.6	549.8	550.5	60.2
Reduced to 32° Fah.....	473.2		473.7	472.9	473.3	473.3	474.		473.6	473.7	473.8	474.4	

JANUARY.]

SECOND MAXIMUM OF HORIZONTAL FORCE.

[1842.]

[97]

616

Göttingen time..... Observatory time	h. m. 21 02 15 21½	Therm., Fah.	h. m. 21 08 15 27½	h. m. 21 14 15 33½	h. m. 21 20 15 39½	h. m. 21 26 15 45½	h. m. 21 32 15 51½	Therm., Fah.	h. m. 21 39 15 57½	h. m. 21 44 16 03½	h. m. 21 50 16 09½	h. m. 21 56 16 15½
Jan. 1.....	578.2	62.	578.1	574.	570.7	581.2	588.1	62.1	592.8	585.2	594.2	593.4
3.....	529.7	59.	530.1	527.6	530.7	539.	538.5	59.5	536.8	537.1	532.2	540.8
4.....	552.1	64.	551.	551.2	548.5	548.	546.	64.	546.5	545.5	545.	544.6
5.....	542.	58.8	540.8	538.3	.....	541.5	542.2	58.8	543.2	544.1	545.8	544.9
6.....	.....	57.	541.5	540.1	.....	539.5	539.	57.	537.9	538.9	538.2	539.2
7.....	568.3	63.5	570.4	571.9	571.7	574.9	577.4	63.3	580.3	579.7	579.4	578.
8.....	568.4	67.3	566.7	567.4	564.5	566.	563.	67.3	562.8	565.7	565.6	565.6
10.....	560.1	68.1	560.7	552.3	552.3	553.2	549.	68.	549.	547.3	546.9	548.2
11.....	570.4	69.8	567.9	567.1	568.1	568.7	569.6	69.	570.	572.3	577.	578.
12.....	568.1	67.	565.7	557.7	556.3	555.	556.6	67.	556.6	556.1	559.	558.3
13.....	541.1	61.6	540.1	539.3	539.4	541.5	540.5	61.5	542.6	545.	542.	542.4
14.....	557.7	64.	556.5	557.	557.2	556.	556.2	64.	558.3	556.1	558.3	.....
15.....	547.2	66.	545.7	544.4	543.5	546.5	544.3	65.9	544.3	544.6	546.3	545.
17.....	597.6	66.4	585.7	585.3	581.	579.4	577.5	66.3	575.6	573.6	573.5	571.
18.....	603.5	70.	609.4	617.2	611.2	599.4	601.4	70.	605.9	605.1	606.6	604.1
19.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20.....	576.9	69.7	576.3	574.8	575.5	572.1	573.8	70.	573.7	574.4	572.7	575.8
21.....	525.4	55.	523.7	523.4	526.	530.6	529.7	55.	535.7	531.8	521.	518.3
22.....	649.9	63.1	649.4	646.1	644.7	639.8	639.4	64.1	640.3	639.3	637.	635.5
24.....	538.1	57.3	531.8	530.1	527.6	526.	531.6	57.5	538.3	538.5	544.4	551.7
25.....	556.5	57.4	551.1	549.4	550.3	550.5	518.8	57.2	547.4	545.1	548.1	548.1
26.....	664.2	65.	663.3	663.3	662.4	660.7	660.	65.	658.7	658.1	657.5	657.9
27.....	547.4	59.4	546.6	547.8	547.2	546.8	547.5	59.3	545.6	550.1	554.8	554.6
28.....	545.7	61.	545.2	544.9	543.9	543.3	543.7	61.	545.	543.1	541.7	541.5
29.....	570.7	66.1	571.4	575.6	585.5	579.2	579.3	67.	579.2	579.	578.5	577.5
31.....	578.3	68.	577.9	575.5	572.7	574.4	578.9	68.	581.5	583.2	585.1	584.9
Means.....	558.4	63.5	557.1	556.9	557.9	556.5	556.9	63.5	557.2	557.1	558.2	558.2
Reduced to 32° Fah.....	472.7	.....	472.1	471.9	471.6	471.4	471.8	.....	472.1	471.9	473.	472.9

SECOND MAXIMUM OF HORIZONTAL FORCE—Continued.

[1942.

Göttingen time Observatory time	A. m. 22 02 16 21½	Therm., Feb.	A. m. 22 08 16 27½	A. m. 22 14 16 32½	A. m. 22 30 16 38½	A. m. 23 26 16 45½	A. m. 23 32 16 51½	Therm., Feb.	A. m. 23 38 16 57½	A. m. 23 44 17 03½	A. m. 23 50 17 09½	A. m. 23 56 17 15½	Therm., Feb.
Jan. 1.....	601.	63.4	603.3	603.	597.5	594.3	593.7	62.7	589.2	593.8	577.8	574.7	62.
3.....	538.5	60.	596.6	594.2	534.4	534.7	534.2	60.4	534.2	533.	532.7	532.5	60.3
4.....	545.5	64.1	546.1	546.	547.4	548.5	547.9	66.	546.4	546.9	546.4	546.4	65.
5.....	546.6	59.	550.8	552.3	558.5	558.5	556.6	59.	552.2	550.8	550.2	550.1	59.
6.....	536.2	57.	537.4	539.3	540.7	540.4	541.6	57.	540.	541.7	540.9	541.1	57.
7.....	575.9	63.	576.	573.9	573.6	574.8	578.4	63.	573.5	573.2	571.3	577.	63.
8.....	566.	66.	566.	564.1	567.	568.3	571.8	67.	568.2	574.8	575.	574.4	67.
10.....	549.3	68.	551.9	552.	552.	551.7	554.7	68.2	555.2	554.9	554.6	556.5	68.4
11.....	577.9	68.5	581.3	583.	583.8	584.7	584.1	68.2	583.2	585.6	586.6	583.8	68.
13.....	561.	67.	561.9	561.2	561.5	562.8	562.4	66.2	563.7	564.3	564.5	563.4	66.8
13.....	544.1	61.4	541.9	540.8	540.	540.2	540.7	61.3	540.9	540.6	541.5	542.5	61.2
14.....	556.3	64.1	557.3	558.1	558.6	559.6	559.3	64.	559.4	555.7	556.	555.9	64.
15.....	546.	66.	546.7	546.	543.3	544.8	545.	65.5	550.3	549.	551.5	550.9	65.
17.....	571.7	66.2	569.9	567.1	567.2	566.9	566.	66.	566.7	568.3	569.	568.4	66.8
19.....	606.3	70.	599.2	597.8	600.2	600.2	600.3	70.	601.3	601.4	602.3	602.5	70.
19.....	576.3	70.2	577.7	591.2	579.9	579.4	580.6	70.	582.3	584.4	587.	586.2	69.2
20.....	575.7	70.	577.4	576.4	576.8	576.5	576.2	69.9	578.2	578.4	578.	580.1	69.8
21.....	518.7	58.	519.4	523.8	524.7	525.8	529.7	58.6	534.3	536.8	545.8	552.2	57.2
23.....	539.3	64.9	544.	543.3	541.	540.7	541.5	64.2	540.7	542.9	545.1	547.2	63.7
24.....	556.	57.3	556.2	566.6	571.7	571.7	567.6	57.	565.7	.....	569.8	568.8	57.
25.....	547.5	57.	548.8	548.1	550.3	549.3	547.3	57.	544.5	547.5	548.	546.4	57.
26.....	556.8	65.	556.4	557.1	557.6	557.3	556.5	65.	556.4	556.5	557.9	556.9	65.
27.....	566.8	59.	560.1	568.5	567.8	568.5	565.5	58.9	557.5	554.8	550.	547.3	58.8
28.....	543.6	60.6	542.7	544.2	546.1	549.5	549.5	60.5	550.5	549.	550.1	552.5	60.4
29.....	577.	67.2	572.	578.6	577.7	578.9	583.5	68.	583.7	582.3	585.4	584.9	68.5
31.....	584.7	68.3	583.3	582.	581.9	580.7	580.2	69.	577.9	579.8	579.4	580.7	69.
Means	559.7	63.9	560.2	560.6	561.1	561.5	562.1	63.8	561.9	561.8	562.5	563.7	63.7
Reduced to 32° Fah.....	473.7		474.2	474.6	475.1	476.6	476.3		476.	476.	476.7	478.	

JANUARY.]

FIRST MINIMUM OF HORIZONTAL FORCE.

[1842.]

[97]

613

Göttingen time..... Observatory time.....	h. m. 1 02 19 21½	Therm., Fah.	h. m. 1 08 19 27½	h. m. 1 14 19 33½	h. m. 1 20 19 39½	h. m. 1 26 19 45½	h. m. 1 32 19 51½	Therm., Fah.	h. m. 1 38 19 57½	h. m. 1 44 20 03½	h. m. 1 50 20 09½	h. m. 1 56 20 15½
Jan. 1.....	584.	60.8	582.	581.4	579.7	578.6	576.5	60.7	576.8	575.3	574.1	574.8
3.....	556.7	60.3	559.5	561.9	559.7	556.5	553.3	60.1	551.7	553.4	554.1	549.7
4.....	559.6	65.9	560.2	561.	560.5	561.8	561.6	65.8	562.3	564.8	563.3	563.
5.....	546.5	58.3	548.1	548.3	546.3	539.2	540.5	58.	539.1	539.	543.2	543.9
6.....	569.7	58.3	562.9	575.5	566.4	566.4	563.3	58.3	555.5	553.6	552.	554.9
7.....	567.6	63.	567.7	568.3	569.3	567.4	566.8	63.	568.1	569.3	568.3	567.7
8.....	574.3	65.3	572.4	573.3	572.6	573.6	573.8	65.	573.2	573.2	572.8	572.5
10.....	569.3	68.2	567.8	564.1	559.5	569.8	566.4	68.5	563.3	564.7	565.5	564.9
11.....	581.5	67.	584.9	593.6	595.6	595.8	592.9	68.	592.8	590.3	595.9	594.5
12.....	568.6	66.3	567.9	569.6	568.3	568.1	566.8	66.5	568.1	566.5	567.	566.6
13.....	553.2	60.5	553.1	552.1	550.4	549.5	549.6	60.3	543.2	553.	553.4	555.
14.....	556.7	63.5	558.	557.2	556.9	557.9	556.7	63.8	556.1	557.8	558.2	560.5
16.....	597.1	61.	601.	602.8	592.	589.	598.9	60.	593.8	585.2	582.4	578.5
17.....	571.8	65.5	569.8	571.5	572.5	574.5	576.	65.	576.5	575.4	574.5	573.9
18.....	616.8	67.	618.1	615.8	616.2	612.	608.2	67.2	605.1	606.3	602.5	608.9
19.....	575.3	68.5	573.8	572.7	575.3	576.1	574.6	69.3	572.3	572.8	573.	574.1
20.....	585.	68.2	582.2	584.	582.2	585.1	581.	68.1	581.3	580.4	580.	580.1
21.....	573.3	60.9	576.	576.2	572.7	571.4	572.2	61.	567.8	562.3	560.7	556.8
22.....	551.7	59.	550.5	547.5	548.4	547.1	545.8	58.	547.7	547.3	547.9	544.6
24.....	538.6	52.5	539.2	535.5	533.4	532.7	532.8	52.8	532.6	533.	535.4	524.8
25.....	.....	57.	541.9	544.3	546.2	543.1	539.	57.8	537.2	536.7	539.4	539.4
26.....	.....	66.	556.	557.3	557.6	558.5	560.	66.8	559.2	568.6	559.7	557.4
27.....	558.4	56.	557.3	558.5	554.7	555.4	552.1	55.2	551.4	551.3	540.5	548.7
28.....	574.2	59.8	573.5	571.7	571.7	570.8	569.	59.4	564.6	562.9	560.6	561.9
29.....	587.8	67.7	587.6	587.3	586.	588.5	586.7	67.8	586.2	587.9	588.2	588.7
31.....	588.4	68.3	589.1	588.9	589.8	589.6	590.2	68.5	589.7	591.4	589.1	589.1
Means.....	571.5	62.9	569.6	570.	568.6	568.	567.1	62.8	565.9	565.9	565.9	565.6
Reduced to 32° Fah....	467.8		466.3	466.7	465.3	464.7	463.9		462.9	463.1	463.3	463.2

JANUARY.]

FIRST MINIMUM OF HORIZONTAL FORCE.—Continued.

[1842.]

Göttingen time. Observatory time	<i>h. m.</i> 2 02 20 21½	Therm., Fah.	<i>h. m.</i> 2 09 20 27½	<i>h. m.</i> 2 14 20 33½	<i>h. m.</i> 2 20 20 39½	<i>h. m.</i> 2 26 20 45½	<i>h. m.</i> 2 33 20 51½	Therm., Fah.	<i>h. m.</i> 2 38 20 57½	<i>h. m.</i> 2 44 21 03½	<i>h. m.</i> 2 50 21 09½	<i>h. m.</i> 2 56 21 15½	Therm., Fah.
Jan. 1	575.7	60.	575.	574.7	574.1	576.2	577.3	68.8	579.4	582.6	583.7	583.2	67.4
2	548.2	60.	548.7	547.6	544.3	547.	548.	69.	548.	549.4	549.9	550.7	68.5
3	563.5	65.	563.1	566.6	563.4	561.1	561.5	65.3	562.7	564.7	569.	572.	65.
4	543.5	57.4	544.2	546.	543.4	546.7	548.3	56.6	547.3	543.4	545.2	545.2	56.3
5	556.4	56.6	559.2	561.7	567.6	567.6	569.7	58.8	570.1	569.	567.2	557.4	58.9
6	566.	63.	567.2	567.	569.2	570.6	571.	69.	571.	571.	571.3	571.5	69.
7	573.8	64.6	574.9	574.	573.4	574.2	574.2	64.1	574.2	572.5	572.2	572.2	63.7
8	565.2	68.4	565.2	564.8	566.	565.6	564.7	68.	568.8	567.1	568.5	565.8	68.
9	590.5	67.	591.9	577.4	573.	571.	578.9	66.2	577.7	579.	579.1	576.1	65.5
10	567.3	66.2	566.1	565.8	565.3	565.6	565.3	66.4	567.	568.6	569.8	569.5	66.2
11	554.4	60.1	555.8	555.5	556.	555.1	552.8	59.6	563.	551.6	550.1	551.2	59.2
12	568.6	63.5	569.3	562.	562.3	560.7	561.	62.	561.	561.7	561.7	561.9	61.
13	573.4	59.8	572.3	568.	568.4	572.	576.9	59.1	571.7	576.7	584.7	596.6	59.7
14	573.7	65.	573.6	573.	573.3	573.	572.8	65.	573.2	572.	575.3	573.2	64.7
15	601.	66.8	591.8	566.2	568.7	572.4	576.2	66.	581.3	567.8	597.3	619.1	64.
16	572.7	68.5	571.8	571.8	573.4	573.9	573.7	69.2	573.8	574.5	574.3	573.9	68.3
17	581.6	68.	580.7	578.8	576.4	576.6	578.2	68.	580.5	580.5	580.7	580.5	68.
18	559.2	61.2	556.2	559.2	559.3	561.3	566.4	61.4	566.4	567.	565.1	568.4	61.7
19	542.	56.6	541.3	542.1	542.	542.5	541.7	55.5	542.1	641.	539.8	538.4	54.6
20	532.6	51.7	534.1	535.	538.	534.	533.7	50.8	531.3	535.	532.	530.7	49.8
21	539.7	57.8	540.	540.8	543.7	543.2	543.3	58.	545.	546.	545.1	544.6	58.
22	560.2	67.1	560.9	561.7	561.2	561.7	563.1	67.	563.6	563.3	562.8	564.4	67.
23	549.	55.8	547.	546.5	544.8	544.7	548.	66.1	551.	551.9	548.1	548.6	56.2
24	566.3	59.3	562.3	562.9	564.2	567.7	567.7	59.7	565.4	564.	565.1	566.6	60.
25	597.3	67.9	598.5	590.	591.7	591.3	590.8	68.	590.4	591.7	593.	594.4	68.
26	589.2	67.5	587.6	588.6	586.2	586.6	586.	67.5	588.5	584.7	582.3	576.1	67.5
Means	564.7	62.4	564.5	563.1	562.9	563.9	564.9	62.2	565.4	566.	566.5	567.	61.9
Reduced to 32° Fah.	492.5		492.4	491.2	491.1	492.2	493.3		494.	494.9	495.5	496.3	

[1842.]

SECOND MINIMUM OF HORIZONTAL FORCE.

JANUARY.]

Göttingen time. Observatory time	h. m.		Therm., Fah.	h. m.		h. m.	h. m.		Therm., Fah.	h. m.		h. m.	h. m.		h. m.	h. m.	
	15 32 9 51½	15 38 9 57½		15 44 10 03½	15 50 10 09½		15 56 10 15½	16 02 10 21½		16 08 10 27½	16 14 10 33½		16 20 10 39½	16 26 10 45½			
Jan. 1	568.4	576.3	59.9	586.7	587.9	593.1	591.1	591.1	59.9	596.3	602.2	607.	615.2	607.	615.2	616.2	616.2
2	518.7	520.7	49.9	519.7	520.	518.5	519.2	519.2	50.7	520.8	523.2	524.1	528.5	524.1	536.5	536.5	536.5
4	558.5	558.3	63.5	558.9	558.9	564.8	567.6	567.6	63.	571.5	573.4	573.	575.	573.	575.	575.	575.
5	550.3	553.7	58.	553.7	553.7	559.	560.6	560.6	58.	562.4	564.3	564.8	565.4	564.8	565.4	565.4	565.4
6	549.6	550.5	52.	552.4	552.6	554.1	554.7	554.7	52.3	556.4	557.	558.4	559.5	558.4	559.5	559.5	559.5
7	.....	571.5	63.2	573.7	576.1	574.6	573.4	573.4	63.	572.1	573.2	574.4	576.	574.4	576.	576.	576.
8	584.6	583.4	61.	584.	585.7	585.6	586.	586.	61.4	586.8	587.2	587.9	589.7	587.9	589.7	589.7	589.7
10	581.2	581.6	69.	582.6	585.	585.4	586.7	586.7	68.8	587.4	588.3	589.1	594.8	591.7	594.8	594.8	594.8
11	570.1	572.4	67.6	573.6	577.4	578.3	579.6	579.6	67.8	577.4	578.3	579.3	579.9	579.3	579.9	579.9	579.9
12	566.2	568.1	65.	571.1	572.4	574.5	575.8	575.8	65.	570.8	571.3	572.4	577.4	572.4	577.4	577.4	577.4
13	563.	563.8	62.	565.3	566.4	568.4	568.8	568.8	62.	570.8	571.3	572.4	577.4	572.4	577.4	577.4	577.4
14	.....	571.3	59.7	572.8	575.2	574.8	577.2	577.2	59.7	570.8	571.3	572.4	577.4	572.4	577.4	577.4	577.4
15	571.5	572.7	61.5	571.8	572.7	574.1	573.7	573.7	61.8	570.8	571.3	572.4	577.4	572.4	577.4	577.4	577.4
17	.....	.....	.....	.....	.....	.....	.....	.....	66.3	570.8	571.3	572.4	577.4	572.4	577.4	577.4	577.4
18	579.8	587.9	66.2	586.6	588.6	602.2	603.6	603.6	67.2	604.7	614.	618.8	637.8	618.8	637.8	637.8	637.8
19	.....	580.9	65.2	589.2	589.5	591.3	592.	592.	65.3	591.4	592.3	593.6	596.7	593.6	596.7	596.7	596.7
20	582.3	587.1	64.	588.4	589.7	589.9	593.1	593.1	64.7	593.8	594.	595.	598.3	595.	598.3	598.3	598.3
21	572.1	572.1	57.	572.5	573.7	573.3	576.	576.	57.	577.	577.6	582.3	586.9	582.3	586.9	586.9	586.9
22	561.2	564.3	61.	566.	568.9	589.4	570.3	570.3	60.8	573.9	573.2	576.1	578.2	576.1	578.2	578.2	578.2
24	535.4	538.4	56.2	539.1	540.1	540.3	541.9	541.9	55.1	541.9	543.2	544.5	546.5	544.5	546.5	546.5	546.5
25	551.5	551.1	50.	551.8	550.4	548.7	548.5	548.5	50.3	543.6	545.2	542.4	545.	542.4	545.	545.	545.
26	546.9	549.	59.	549.3	550.1	551.6	551.8	551.8	59.7	554.5	555.8	557.7	558.7	557.7	558.7	558.7	558.7
27	556.7	557.6	60.	557.2	557.	558.4	560.	560.	60.	559.8	561.1	565.5	568.5	565.5	568.5	568.5	568.5
28	547.1	547.2	58.3	545.7	550.4	553.2	553.8	553.8	58.5	552.2	553.	553.7	555.	553.7	555.	555.	555.
29	540.9	544.7	57.	548.	548.5	549.7	550.9	550.9	58.	550.2	555.8	559.2	559.4	559.2	559.4	559.4	559.4
31	596.3	598.8	67.2	601.2	604.8	608.7	611.5	611.5	67.	612.4	613.6	616.2	618.4	616.2	618.4	618.4	618.4
Means	561.5	564.9	60.5	568.6	568.4	569.6	571.4	571.4	60.9	572.4	574.1	575.7	578.1	575.7	578.1	578.1	578.1
Reduced to 32° Fah.	485.5	488.	.....	489.6	491.4	492.4	493.4	493.4	.....	494.3	495.9	497.7	499.5	497.7	499.5	499.5	499.5

JANUARY.]

SECOND MINIMUM OF HORIZONTAL FORCE—Continued.

[1942.]

Göttingen time..... Observatory time.....	<i>h. m.</i> 16 32 10 51½	<i>Therm.,</i> Fah.	<i>h. m.</i> 16 38 11 03½	<i>h. m.</i> 16 44 11 03½	<i>h. m.</i> 16 50 11 09½	<i>h. m.</i> 16 56 11 15½	<i>h. m.</i> 17 02 11 21½	<i>Therm.,</i> Fah.	<i>h. m.</i> 17 08 11 27½	<i>h. m.</i> 17 14 11 33½	<i>h. m.</i> 17 20 11 39½	<i>h. m.</i> 17 26 11 45½	<i>Therm.,</i> Fah.
Jan. 1.....	615.3	59.8	616.7	618.1	610.3	611.4	614.1	59.8	609.7	608.6	604.2	592.	59.7
3.....	526.7	51.2	528.2	529.5	528.4	528.9	529.5	52.	530.8	532.	532.3	532.4	52.9
4.....	575.9	62.7	576.3	578.	579.5	579.4	579.1	62.8	579.1	579.5	579.2	576.	62.8
5.....	564.4	57.7	565.9	565.4	565.8	565.	562.	57.4	563.	563.6	562.	563.	57.
6.....	561.4	53.	562.1	564.6	563.9	563.4	565.2	53.8	568.3	570.1	569.6	569.5	54.5
7.....	578.1	63.8	578.3	580.	579.9	582.	584.2	63.9	581.5	581.8	587.5	587.5	64.
8.....	590.6	61.7	589.5	591.7	591.6	592.3	591.4	62.5	590.3	588.4	587.	588.6	63.2
9.....	594.3	68.	595.	595.	594.	592.7	593.5	68.	594.7	593.3	592.2	593.2	68.
10.....	579.2	66.2	578.2	576.8	578.2	581.2	580.4	69.	582.1	584.6	587.6	.....	69.
11.....	.....	65.	581.4	580.6	580.3	581.3	580.8	65.	581.4	581.	581.4	579.6	65.
12.....	578.5	62.	577.9	579.	580.6	582.4	580.5	62.	581.	581.4	578.8	576.6	62.
13.....	579.7	60.7	578.8	579.	579.5	579.2	580.	61.8	580.6	581.1	583.5	583.5	62.3
14.....	577.6	62.	576.	578.8	579.3	579.	577.7	62.	576.9	575.	575.3	573.6	62.
15.....	601.8	65.8	603.1	605.5	605.3	607.	606.9	65.9	607.1	608.5	609.7	610.8	66.
16.....	630.1	68.1	631.5	627.9	628.6	622.2	621.2	68.3	631.2	638.	646.7	648.4	68.5
17.....	593.4	65.7	593.3	595.7	594.	594.7	594.8	66.	596.	596.	595.3	594.5	66.
18.....	598.3	65.1	599.3	600.3	600.2	600.9	600.6	65.9	601.3	602.3	602.1	602.3	66.3
19.....	581.2	66.5	580.8	580.7	580.5	579.5	579.	66.	579.	577.4	577.2	574.3	65.9
20.....	577.1	60.6	577.5	576.5	577.	576.6	576.	60.4	575.4	576.2	574.5	574.1	60.3
21.....	547.6	55.2	547.2	547.6	547.	548.2	549.	55.3	549.4	546.9	545.	544.4	56.3
22.....	542.6	51.3	543.7	539.5	543.6	543.5	543.	52.3	543.6	543.9	542.9	545.4	53.6
23.....	559.9	60.4	560.6	562.7	563.	564.	564.5	61.	565.5	566.3	566.8	567.	61.2
24.....	.....	59.5	569.	560.	560.7	560.6	561.7	59.	.....	569.9	560.8	559.2	58.1
25.....	566.5	58.7	567.	565.7	567.7	568.4	568.6	58.9	569.4	568.5	569.5	.....	59.1
26.....	563.2	59.	565.6	568.1	569.4	.....	.....	60.	572.6	576.1	577.5	579.8	60.9
27.....	614.	66.5	615.4	616.1	615.5	.....	615.3	66.5	614.1	615.3	614.2	615.3	66.5
28.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means.....	578.6	61.1	578.4	578.9	579.	578.1	579.6	61.3	580.6	580.2	580.3	580.3	61.5
Reduced to 32° Fah.....	500.3	.....	499.7	500.1	500.1	499.4	500.2	.....	501.1	500.9	500.9	501.2	.....

	<i>h.</i> 6 00 0 19½	<i>h.</i> 6 06 0 25½	<i>h.</i> 6 12 0 31½	<i>h.</i> 6 18 0 37½	<i>h.</i> 6 24 0 43½	<i>h.</i> 6 30 0 49½	<i>h.</i> 6 36 0 55½	<i>h.</i> 6 42 1 01½	<i>h.</i> 6 48 1 07½	<i>h.</i> 6 54 1 13½
Göttingen time.....										
Observatory time.....										
Feb. 1.....	569.3	569.3	567.5	566.7	562.	559.8	560.7	560.	559.3	556.7
2.....	560.5	560.2	560.6	560.6	560.	558.5	558.7	558.9	559.	559.3
3.....	562.1	562.2	562.9	562.8	562.7	562.7	563.	563.	563.2	563.1
4.....	561.1	561.1	561.3	560.8	560.6	560.7	560.4	560.	560.	560.8
5.....	567.2	566.5	566.7	566.9	566.8	566.4	566.8	566.8	567.2	567.5
6.....	567.2	567.2	567.0	566.7	567.7	555.	554.7	558.7	560.9	555.5
7.....	573.3	573.3	570.7	569.9	564.5	563.8	564.6	565.2	565.	563.7
8.....	564.1	563.8	562.9	562.7	564.1	565.1	565.	564.9	565.	565.
9.....	565.5	564.8	563.7	563.9	563.2	563.6	563.6	562.9	563.2	564.5
10.....	563.5	564.	564.1	563.7	562.7	562.7	562.8	563.6	564.4	564.1
11.....	564.8	565.5	563.6	564.8	562.7	562.7	562.8	563.6	564.4	564.1
12.....	575.8	575.8	573.3	573.3	573.3	573.3	573.3	573.3	573.3	573.3
13.....	555.5	557.1	557.3	556.5	554.3	554.8	555.4	554.9	555.	554.5
14.....	566.	567.1	567.2	566.9	567.4	568.1	567.4	568.8	568.8	568.3
15.....	567.6	568.2	565.6	566.9	567.4	568.1	567.4	568.8	568.8	568.3
16.....	565.	570.2	568.5	569.1	568.7	568.1	568.3	561.4	565.7	566.8
17.....	566.3	566.8	564.6	565.6	564.5	565.1	565.4	565.2	563.9	564.4
18.....	567.	566.4	564.7	564.7	564.2	564.6	563.8	564.5	564.6	563.8
19.....	565.1	565.3	565.2	565.4	565.9	566.6	566.6	566.9	566.9	566.6
20.....	563.3	563.3	562.4	562.4	563.4	563.8	564.4	564.5	566.3	565.4
21.....	562.1	562.3	561.7	561.8	563.6	563.	562.8	563.1	563.5	562.9
22.....	565.8	565.9	565.8	565.3	564.6	563.8	564.2	565.4	566.5	566.1
23.....	561.3	563.5	563.8	564.2	573.3	571.2	570.9	569.8	568.6	567.8
24.....	563.3	564.1	565.6	564.2	563.1	563.4	564.4	563.8	563.3	563.2
25.....	565.4	566.1	566.6	566.	564.7	563.8	563.6	564.2	563.4	563.3
Means.....	565.	565.1	565.3	565.4	565.2	564.3	564.5	564.6	564.7	564.4

[1942.]

FIRST MAXIMUM OF DECLINATION—Continued.

FEBRUARY.]

	A. m. 7 00 1 19½	A. m. 7 06 1 26½	A. m. 7 12 1 31½	A. m. 7 18 1 37½	A. m. 7 24 1 43½	A. m. 7 30 1 49½	A. m. 7 36 1 55½	A. m. 7 42 2 01½	A. m. 7 48 2 07½	A. m. 7 54 2 13½
Gottingen time.....										
Observatory time.....										
Feb. 1.....	556.1	556.	550.8	556.3	557.9	561.2	557.4	555.3	558.3	557.3
2.....	558.	560.7	559.1	559.4	559.4	557.7	558.8	558.6	554.1	553.5
3.....	563.4	563.2	563.3	563.7	563.7	562.9	563.1	563.3	561.4	561.
4.....	561.	560.5	560.7	561.1	567.6	561.3	561.3	560.4	560.9	561.3
5.....	567.1	567.2	567.	566.1	567.6	567.6	566.9	566.8	566.1	564.8
6.....	551.	551.4	555.	559.2	565.2	566.	564.7	565.7	566.3	567.9
7.....	564.8	564.	564.	564.	564.7	564.1	564.1	564.	564.5	564.2
8.....	563.2	564.9	563.1	563.5	566.4	563.9	563.8	563.5	563.4	563.6
9.....	564.	564.6	565.	565.	565.2	565.4	565.2	566.	565.7	565.6
10.....	564.6	564.3	564.4	564.3	564.6	565.1	565.2	565.8	565.1	567.6
11.....	568.3	567.	565.6	564.7	563.7	579.4	578.8	575.2	572.3	569.4
12.....	564.	563.6	562.5	562.5	553.	563.9	556.	565.4	565.2	565.1
13.....	567.3	568.5	568.5	568.5	568.5	568.5	568.5	566.6	568.1	567.4
14.....	569.8	566.7	568.5	567.3	566.3	566.6	565.8	566.7	566.4	566.2
15.....	564.2	565.7	565.8	565.8	565.8	565.8	565.4	567.9	568.5	567.5
16.....	563.2	564.7	566.3	566.7	565.5	566.1	564.1	564.3	563.8	563.5
17.....	567.2	566.9	566.8	566.7	564.8	563.4	563.2	563.2	563.9	563.9
18.....	565.6	564.5	564.1	564.9	565.3	564.9	566.2	566.1	564.3	563.2
19.....	563.2	563.9	564.5	564.5	562.4	562.3	563.	562.8	563.4	563.2
20.....	566.8	567.1	566.5	567.3	568.1	567.8	568.8	568.5	568.9	568.9
21.....	567.6	565.9	564.2	564.9	564.	563.4	563.8	562.8	563.4	563.6
22.....	562.5	562.5	563.2	563.2	562.4	562.1	561.6	565.5	565.3	567.3
23.....	564.9	564.9	564.	563.4	563.9	563.3	564.1	564.	564.3	564.7
Means.....	564.3	564.5	564.1	564.7	564.9	564.6	564.5	564.	563.8	563.7

FEBRUARY.]

SECOND MAXIMUM OF DECLINATION.

[1842.]

[97]

624

	<i>h. m.</i> 18 00 13 19½	<i>h. m.</i> 18 06 12 26½	<i>h. m.</i> 18 12 12 31½	<i>h. m.</i> 18 18 12 37½	<i>h. m.</i> 18 24 12 43½	<i>h. m.</i> 18 30 12 49½	<i>h. m.</i> 18 36 12 55½	<i>h. m.</i> 18 42 13 01½	<i>h. m.</i> 18 48 13 07½	<i>h. m.</i> 18 54 13 13½
<i>Gottingen time.</i>										
<i>Observatory time.</i>										
Feb. 1.....	547.	551.2	555.3	552.2	552.8	553.3	552.2	552.6	551.3	552.3
2.....	554.1	554.1	555.8	554.	553.2	552.2	553.5	554.	552.8	552.8
3.....	556.	556.3	555.8	555.2	555.7	556.	555.6	554.4	555.7	555.3
4.....	554.	553.7	554.	553.3	553.	552.5	553.8	553.3	553.3	553.2
5.....	560.1	559.6	559.3	559.1	559.4	558.5	558.1	558.1	557.3	556.7
6.....	556.8	557.	556.	555.4	554.8	556.	556.6	555.8	556.	557.3
7.....	560.2	559.4	558.1	559.8	558.	558.	557.3	558.9	557.8	557.3
8.....	559.3	557.8	556.7	557.1	556.1	556.6	556.7	556.2	555.9	556.3
9.....	562.2	561.	561.1	560.6	560.4	560.4	561.	560.	560.	559.2
10.....	556.1	556.8	556.3	555.4	555.5	554.4	554.1	554.8	554.1	553.2
11.....	558.9	558.7	558.7	557.5	557.5	556.8	557.4	557.5	557.	556.6
12.....	560.5	560.5	559.	558.3	558.1	557.7	557.4	555.8	556.	555.8
13.....	563.8	562.8	563.2	562.3	562.1	562.3	562.	562.3	562.1	562.8
14.....	560.6	560.8	560.3	559.1	558.3	558.3	557.	556.4	556.7	564.6
15.....	554.2	553.4	555.5	554.3	554.1	555.8	556.6	555.4	557.7	558.
16.....	555.5	558.	558.7	558.7	560.6	558.3	558.4	558.2	558.4	558.8
17.....	558.3	557.3	556.	557.	556.6	556.5	556.2	556.	555.8	563.4
18.....	562.3	562.3	562.5	562.2	562.2	562.1	562.1	561.8	561.9	561.6
19.....	558.3	558.4	558.	558.2	557.8	558.	558.4	557.5	557.	557.8
20.....	559.8	560.2	559.3	558.7	558.5	558.5	558.6	558.4	558.2	557.2
21.....	550.4	548.7	548.7	551.	553.6	550.8	547.	544.7	541.9	542.1
22.....	562.6	560.7	560.1	559.5	559.6	559.5	560.7	560.9	560.4	557.8
23.....	557.8	557.6	556.9	556.2	556.4	556.3	556.2	555.3	555.3	555.
24.....	557.8	557.4	557.3	557.	556.4	555.8	555.5	555.5	555.2	554.6
Mean.....	557.8	557.5	557.6	557.2	557.1	556.8	556.7	556.3	556.1	556.8

[1842.]

FIRST MINIMUM OF DECLINATION.

FEBRUARY.]

	h. m. 2 00 20 19½	h. m. 2 06 20 25½	h. m. 2 12 20 31½	h. m. 2 18 20 37½	h. m. 2 24 20 43½	h. m. 2 30 20 49½	h. m. 2 36 20 55½	h. m. 2 42 21 01½	h. m. 2 48 21 07½	h. m. 2 54 21 13½
Getting time.....	575.9	572.6	568.4	567.6	566.	569.1	565.1	565.	565.1	565.9
Observatory time.....	561.3	562.	562.7	563.1	563.1	562.6	562.7	562.9	561.7	562.8
1.....	566.2	568.9	568.6	568.4	566.9	561.5	564.5	564.	564.4	564.7
2.....	565.5	568.3	568.8	566.	566.2	565.8	566.6	566.8	566.6	566.4
3.....	562.9	563.3	563.2	564.6	563.3	562.7	563.6	563.2	563.6	564.
4.....	563.3	564.5	561.5	564.1	564.3	564.6	564.2	562.9	563.5	563.4
5.....	569.	569.	568.2	568.3	567.6	566.	567.2	566.7	568.	566.8
6.....	566.2	566.3	566.7	566.8	567.1	569.4	567.5	567.5	564.5	566.7
7.....	566.6	566.	564.7	564.9	565.8	563.1	569.2	562.9	563.8	566.7
8.....	568.2	569.2	569.3	568.2	565.9	570.1	574.	578.5	571.9	569.5
9.....	569.1	560.3	560.	569.5	560.4	569.7	569.8	569.7	558.9	560.5
10.....	565.6	564.8	565.2	569.4	573.	573.6	575.9	575.2	573.1	570.6
11.....	565.1	567.3	565.	563.6	565.5	564.1	564.8	565.2	565.1	567.8
12.....	564.	564.	559.6	561.	559.2	563.4	568.	566.	563.3	561.3
13.....	558.2	559.6	560.	561.4	560.3	560.8	580.	561.8	562.	561.2
14.....	571.2	574.8	574.	570.4	570.4	569.2	569.3	570.6	572.2	569.4
15.....	568.9	569.	571.	571.8	572.1	568.6	569.7	567.1	567.9	564.7
16.....	562.7	562.9	562.4	562.	563.5	560.5	563.1	565.	563.7	563.3
17.....	568.2	570.1	570.	570.	566.2	569.	566.6	566.9	566.2	564.6
18.....	562.3	561.9	561.8	561.2	569.7	569.5	568.5	659.6	561.2	560.7
19.....	541.3	541.7	544.1	556.7	561.1	549.4	550.9	547.3	563.2	568.4
20.....	562.2	563.6	564.2	564.1	563.7	568.5	565.	565.	566.5	566.6
21.....	571.3	573.	574.2	575.3	574.2	572.6	573.	570.2	569.1	567.3
22.....	569.6	569.5	568.5	565.1	565.	566.6	567.4	567.3	568.2	567.
Means.....	565.	565.4	565.1	565.5	566.4	565.5	566.1	564.9	565.5	565.3

[1842.]

FIRST MINIMUM OF DECLINATION—Continued.

FEBRUARY.

	h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.	
	3 00	21 19½	3 06	21 26½	3 12	21 31½	3 18	21 37½	3 24	21 43½	3 30	21 49½	3 36	21 55½	3 42	22 01½	3 48	22 07½
Göttingen time																		
Observatory time																		
Feb. 1	564.3		564.3		567.		566.		565.3		566.1		566.4		569.		565.3	
2	564.9		562.2		562.9		563.1		563.3		563.		562.7		563.		563.9	
3	565.5		565.8		566.4		566.1		565.3		566.1		565.6		566.		565.1	
4	569.8		564.		561.2		564.		564.1		564.7		564.6		565.1		564.6	
5	564.		564.4		564.4		564.		564.1		564.2		563.9		564.4		564.2	
6	567.3		567.5		568.		568.4		569.5		568.5		566.6		567.4		567.4	
7	566.4		566.4		565.7		566.		566.5		566.6		565.6		565.6		565.6	
8	564.2		564.5		563.4		564.1		564.1		565.2		565.5		566.		565.1	
9	569.4		572.2		574.5		575.5		570.3		573.5		571.0		574.4		579.2	
10	562.3		566.		566.6		564.		561.7		563.4		565.1		565.4		564.6	
11	570.1		569.9		572.3		567.		565.		566.3		568.3		566.4		568.8	
12	567.1		567.1		565.8		565.1		565.		566.3		566.		564.2		565.4	
13	565.9		562.4		562.7		561.8		567.3		568.3		560.7		563.7		563.	
14	562.4		561.7		560.7		562.1		562.		560.7		562.2		562.5		562.1	
15	568.6		570.8		573.6		570.6		570.6		569.1		570.		578.4		580.5	
16	563.9		564.3		565.1		564.7		565.		568.9		567.3		568.1		567.9	
17	563.8		562.6		563.4		563.1		562.8.		564.1		566.6		567.6		568.8	
18	566.5		564.4		564.1		562.4		562.9		562.6		564.		562.3		562.9	
19	561.9		562.		561.3		562.4		559.7		560.1		564.7		569.6		571.4	
20	565.5		562.7		563.6		561.7		563.7		566.		564.1		564.6		564.9	
21	568.		567.5		566.		566.3		565.5		563.7		563.		562.		561.4	
22	565.7		564.5		564.4		565.7		564.5		563.8		563.5		563.7		562.7	
23	566.3		567.3		568.8		566.		565.8		565.9		566.1		566.1		566.4	
Means	565.5		565.3		565.6		565.2		565.1		565.4		565.3		565.8		566.4	

[1842.]

SECOND MINIMUM OF DECLINATION.

FEBRUARY.]

	A. m. 13 00 7 19½	A. m. 13 06 7 25½	A. m. 13 12 7 31½	A. m. 13 18 7 37½	A. m. 13 24 7 43½	A. m. 13 30 7 49½	A. m. 13 36 7 55½	A. m. 13 42 8 01½	A. m. 13 48 8 07½	A. m. 13 54 8 13½
Göttingen time.....										
Observatory time.....										
Feb. 1.....	562.5	562.5	561.	565.8	569.5	568.0	568.8	560.	561.8	563.4
2.....	564.4	566.7	566.8	562.	562.9	561.4	562.	563.7	571.5	569.5
3.....	565.6	565.3	564.9	566.8	566.3	565.2	563.6	562.5	560.	567.
4.....	.....	.....	.....	566.1	566.1	566.6	567.	566.6	567.	567.1
5.....	565.4	566.2	566.4	568.7	568.8	568.8	569.2	569.6	569.4	570.1
6.....	562.4	563.4	565.1	566.1	568.9	568.9	570.5	569.9	568.3	565.4
7.....	.....	564.6	565.	567.1	567.7	564.9	566.8	566.5	566.6	566.8
8.....	.....	567.5	567.9	568.	568.4	568.	567.9	568.1	568.3	568.5
9.....	567.	569.8	564.8	564.8	565.6	565.8	568.3	567.	567.4	568.6
10.....	568.1	569.3	569.2	568.5	568.3	568.2	568.7	567.3	567.3	567.
11.....	566.1	569.3	569.2	568.5	568.3	568.2	568.7	567.3	567.3	567.
12.....	576.2	576.8	575.4	576.6	577.6	578.	577.5	575.7	575.7	573.4
13.....	569.1	560.7	560.	566.8	568.4	569.6	560.2	567.7	560.5	569.9
14.....	567.	566.	567.2	567.2	566.2	566.6	568.	568.	569.7	568.
15.....	569.2	567.7	568.	568.3	570.	569.4	571.2	567.5	569.6	569.
16.....	561.3	560.2	548.5	547.	545.5	549.1	551.8	556.3	556.4	556.5
17.....	568.	569.4	570.	566.9	565.6	566.2	567.2	567.9	570.7	567.9
18.....	559.4	559.	558.4	563.2	560.1	561.8	557.4	.....	.....	554.
19.....	564.9	565.3	564.8	566.3	566.4	566.8	568.6	567.5	567.5	567.7
20.....	564.6	564.8	564.1	565.3	567.	567.9	568.7	565.5	566.9	565.
21.....	567.2	567.5	567.5	568.	568.1	567.6	568.3	569.7	567.5	568.
22.....	573.8	573.	574.5	573.7	574.1	.....	569.8	569.7	570.9	573.5
23.....	560.2	566.3	566.6	567.1	568.	566.6	566.6	566.5	567.6	567.4
24.....	567.7	567.5	568.1	567.2	567.8	568.3	568.2	568.7	570.	570.3
25.....	571.3	571.3	571.8	572.7	572.1	572.1	572.7	572.5	572.5	572.
Mean.....	565.1	565.4	565.5	566.2	565.2	565.9	566.4	566.8	567.5	568.5

FEBRUARY.]

MAXIMUM OF VERTICAL FORCE.

[1843.]

Göttingen time. Observatory time.	<i>h. m.</i> 22 04 16 33½	Therm., Fah.	<i>h. m.</i> 22 10 16 39½	<i>h. m.</i> 22 16 16 35½	<i>h. m.</i> 22 22 16 41½	<i>h. m.</i> 22 28 16 47½	<i>h. m.</i> 22 34 16 53½	Therm., Fah.	<i>h. m.</i> 22 40 16 59½	<i>h. m.</i> 22 46 17 05½	<i>h. m.</i> 22 52 17 11½	<i>h. m.</i> 22 58 17 17½
Feb. 1.....	720.3	65.7	719.1	719.9	719.2	719.2	719.5	65.5	717.7	718.5	718.6	718.5
2.....	776.2	76.8	782.9	788.5	795.4	799.5	802.	74.	803.5	806.7	809.2	811.
3.....	798.	72.5	797.	797.6	797.8	798.5	798.7	72.7	799.4	800.3	800.	800.6
4.....	846.	74.7	844.7	843.6	842.	841.1	841.6	74.2	838.5	838.5	837.2	836.
5.....	595.3	57.5	594.9	594.5	594.	593.9	593.	56.8	592.9	592.	591.5	590.8
7.....	720.2	65.7	721.	720.3	721.6	722.7	722.	65.5	722.2	722.3	722.9	723.6
8.....	758.1	66.3	756.8	756.2	756.	754.7	755.7	65.7	753.5	752.5	752.	750.1
9.....	683.9	66.3	684.8	686.	694.1	695.4	696.5	62.3	695.8	694.	694.5	692.4
10.....	781.3	69.5	781.3	781.6	781.6	781.8	781.9	70.	781.5	782.2	783.5	782.
11.....	779.2	70.	779.3	777.5	778.1	777.8	778.6	69.5	776.6	776.3	775.5	775.1
12.....	.....	.....	.....	.....	.....	.....	774.5	72.	776.2	772.2	779.	779.7
14.....	775.2	70.7	775.9	775.5	776.9	776.8	777.	70.2	778.2	778.4	779.	778.4
15.....	741.2	66.4	740.1	739.1	737.1	736.1	734.8	65.6	732.8	733.1	731.6	730.9
16.....	706.2	64.3	706.1	705.2	704.2	703.8	703.2	64.	703.4	706.8	700.9	701.5
17.....	586.4	56.5	586.4	588.	589.1	589.5	589.2	56.6	589.6	587.2	586.3	586.2
18.....	648.2	59.7	647.4	648.	646.7	642.	640.	60.	640.6	642.	641.8	640.7
19.....	718.5	70.6	722.5	725.8	726.5	724.5	730.7	71.8	733.	735.9	738.4	738.3
21.....	627.3	62.7	627.	627.1	627.5	628.	628.9	63.6	629.4	631.2	632.5	634.3
22.....	722.8	68.2	721.5	722.	721.5	720.5	720.4	67.5	718.7	718.5	717.6	716.8
23.....	628.9	63.	628.1	628.8	626.7	625.3	625.1	61.9	623.3	622.1	621.	620.1
24.....	638.1	66.3	636.3	634.	634.6	634.5	630.5	66.4	625.6	625.9	618.8	622.4
25.....	623.2	62.7	622.6	622.6	622.1	622.1	621.8	62.5	621.8	621.8	622.3	622.4
26.....	656.8	65.2	656.3	656.5	656.8	657.	657.8	65.2	657.5	657.5	658.	658.1
28.....	740.	75.	742.6	745.3	747.1	749.6	751.8	76.5	757.1	756.7	760.	761.9
Means.....	707.4	66.8	707.6	707.9	708.5	708.4	711.5	66.6	711.2	711.6	711.3	711.3
Reduced to 32° Fah.....	287.6		288.8	240.2	241.9	242.9	244.4		245.2	246.6	247.4	248.5

February.]

MAXIMUM OF VERTICAL FORCE—Continued.

[1842,

Getting time..... Observatory time.....	<i>h. m.</i> 23 04 17 23½	Therm., Fah.	<i>h. m.</i> 23 10 17 29½	<i>h. m.</i> 23 16 17 35½	<i>h. m.</i> 23 22 17 41½	<i>h. m.</i> 23 28 17 47½	<i>h. m.</i> 23 34 17 53½	Therm., Fah.	<i>h. m.</i> 23 40 17 59½	<i>h. m.</i> 23 46 18 05½	<i>h. m.</i> 23 52 18 11½	<i>h. m.</i> 23 58 18 17½	Therm., Fah.
Feb. 1.....	719.	65.7	716.7	717.2	717.4	717.8	718.	65.8	719.8	718.8	719.5	719.3	65.8
2.....	811.5	72.1	813.5	812.	812.5	813.2	807.	72.	811.2	809.9	808.9	807.6	70.3
3.....	803.6	72.5	800.9	800.9	800.8	800.2	800.3	72.2	799.5	798.5	799.1	799.	72.
4.....	835.	73.9	833.8	832.4	832.1	831.	830.5	73.6	829.1	828.	826.5	826.1	73.3
5.....	590.	56.6	589.9	589.5	588.5	587.5	587.6	55.5	586.5	585.4	585.	583.7	54.5
6.....	725.	66.2	725.5	725.6	727.5	728.8	730.	67.	731.1	733.8	736.2	739.	68.
7.....	749.	65.2	749.2	748.5	747.3	746.2	745.7	65.1	744.2	743.5	743.4	741.	65.1
8.....	691.8	61.	692.5	689.5	688.6	686.6	684.5	59.6	681.5	679.5	677.3	675.4	59.2
9.....	782.6	69.6	783.1	782.5	782.2	782.8	782.5	69.3	782.3	782.1	782.	782.	68.8
10.....	779.5	68.5	772.9	771.2	770.4	768.7	767.7	68.3	767.	764.6	763.4	761.6	68.
11.....	780.4	71.	781.	781.4	781.9	782.	782.	70.2	782.	782.5	782.4	782.1	70.
12.....	777.2	69.4	778.7	778.	778.	778.	776.4	67.7	776.1	773.6	769.5	769.5	66.1
13.....	728.5	64.8	727.5	726.9	725.8	722.6	720.9	64.	719.8	717.4	715.4	713.	63.3
14.....	700.6	64.	699.2	699.	698.8	699.2	699.3	64.	697.2	701.7	700.3	699.	64.
15.....	583.7	55.3	583.7	581.5	581.5	579.5	579.7	54.8	579.	577.9	578.	578.	54.2
16.....	641.1	60.9	639.2	642.3	643.6	644.7	646.4	61.5	646.1	647.3	648.1	648.5	62.2
17.....	739.5	71.2	740.7	741.1	741.	740.5	739.8	69.7	739.6	735.8	733.1	733.1	68.2
18.....	636.1	64.3	638.1	639.2	641.1	643.7	645.5	65.1	646.2	650.6	652.5	659.3	65.
19.....	716.4	67.4	715.4	716.	713.7	711.5	711.	67.3	712.1	709.5	710.	710.	67.3
20.....	618.2	61.3	616.1	616.6	615.1	613.5	612.	60.8	611.5	610.2	609.	608.5	60.5
21.....	625.	66.3	620.2	627.4	629.2	625.1	622.5	65.9	619.5	619.5	626.6	627.7	65.6
22.....	622.4	62.3	622.	621.9	621.3	621.3	621.8	62.1	621.	620.5	620.1	619.9	61.9
23.....	658.3	65.1	658.7	658.	658.6	658.4	657.5	64.9	657.6	657.8	658.	658.	64.7
24.....	761.8	74.	763.	763.6	763.9	764.1	764.2	73.8	765.	764.6	765.9	765.8	73.8
Means.....	711.1	66.2	710.9	710.9	710.8	710.3	709.7	65.8	709.3	709.	708.7	708.6	65.4
Reduced to 32° Fah.....	249.4		250.2	251.3	252.3	252.9	253.4		254.4	255.5	256.6	257.7	

[1842.]

MINIMUM OF VERTICAL FORCE.

FEBRUARY.]

	<i>h. m.</i> 12 34 6 53½	Therm., Feb.	<i>h. m.</i> 12 40 6 59½	<i>h. m.</i> 13 46 7 08½	<i>h. m.</i> 12 52 7 11½	<i>h. m.</i> 12 58 7 17½	<i>h. m.</i> 13 04 7 23½	Therm., Feb.	<i>h. m.</i> 13 10 7 29½	<i>h. m.</i> 13 16 7 35½	<i>h. m.</i> 13 22 7 41½	<i>h. m.</i> 13 28 7 47½
Göttingen time.....												
Observatory time.....												
Feb. 1.....	755.3	67.3	755.1	754.3	753.	752.	752.	67.	748.6	749.2	748.6	748.3
2.....	723.1	64.4	725.6	724.1	722.7	720.6	720.3	64.	718.7	714.7	713.2	710.3
3.....	813.8	72.3	813.6	813.	810.2	810.6	810.3	73.1	810.9	810.2	810.7	810.7
4.....	882.	77.3	882.6	880.3	880.5	880.1	879.5	77.1	878.5	878.	878.5	876.6
5.....	709.1	64.2	707.4	704.8	703.2	700.9	697.1	63.4	696.3	692.4	690.6	687.8
6.....	560.2	53.2	560.	559.3	556.8	555.	552.6	53.	551.1	551.2	550.4	549.3
7.....	812.	70.4	811.3	810.	811.3	810.1	808.2	69.8	807.	808.1	807.	805.6
8.....	534.3	50.8	535.	534.8	536.2	537.6	538.5	51.5	539.4	540.2	542.5	544.7
9.....	739.9	65.	739.4	739.1	738.	737.1	737.9	64.6	736.7	736.5	734.4	734.7
10.....	825.1	74.2	826.4	829.4	829.	829.9	830.4	74.3	833.	832.6	834.7	834.2
11.....	820.	72.4	818.2	818.7	819.	818.5	816.5	71.5	818.5	818.2	816.	815.1
12.....	823.5	71.8	823.5	823.1	824.	822.4	824.2	71.6	822.6	821.6	821.1	823.3
13.....	700.7	63.2	701.	701.1	699.8	699.3	699.7	62.8	698.2	697.8	697.5	699.2
14.....	686.	61.6	686.	686.	684.	682.7	682.8	62.	682.2	682.	678.7	678.3
15.....	673.3	60.4	673.4	672.7	676.6	673.3	673.4	60.2	670.5	672.2	671.7	671.3
16.....	647.5	62.	649.8	651.4	653.3	654.5	657.7	62.	660.4	661.5	665.4	665.9
17.....	725.3	67.3	725.	724.7	726.6	726.	736.6	67.5	739.1	744.	740.2	743.1
18.....	568.	58.4	567.1	570.	568.2	568.8	569.5	58.5	571.	570.6	570.2	572.1
19.....	678.3	65.2	679.3	678.5	678.3	678.	678.1	65.2	677.2	677.2	676.3	675.9
20.....	629.4	61.8	627.1	626.1	624.9	622.9	620.8	60.8	618.5	617.2	614.5	613.9
21.....	623.9	62.8	621.7	621.9	621.6	622.3	625.	63.	625.9	625.	625.	619.9
22.....	605.5	61.	606.3	605.7	605.4	605.2	604.6	61.	604.7	603.7	603.9	603.2
23.....	679.	65.	678.5	680.2	680.8	680.2	678.6	65.1	681.1	682.	682.5	681.4
24.....	486.3	61.	488.3	491.7	495.1	498.5	501.7	61.	504.3	507.3	512.3	516.
Means.....	695.3	64.7	695.4	695.4	695.3	694.8	695.2	64.6	695.2	695.1	694.7	694.5
Reduced to 32° Fah.....	254.		254.	254.3	254.5	254.3	255.1		254.	253.8	251.3	250.

* Supplied.

FEBRUARY.]

MINIMUM OF VERTICAL FORCE—Continued.

[1862.]

Göttingen time..... Observatory time.....	<i>h. m.</i> 13 34 7 53½	Therm., Feb.	<i>h. m.</i> 13 40 8 59½	<i>h. m.</i> 13 46 8 05½	<i>h. m.</i> 13 52 8 11½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 14 04 8 23½	Therm., Feb.	<i>h. m.</i> 14 10 8 29½	<i>h. m.</i> 14 16 8 35½	<i>h. m.</i> 14 22 8 41½	<i>h. m.</i> 14 28 8 47½	Therm., Feb.
Feb. 1.....	747.3	67.6	747.5	744.7	745.2	745.4	746.7	67.6	746.7	745.6	745.9	747.8	67.7
2.....	708.5	65.3	708.8	708.1	708.3	710.3	710.8	67.	712.5	715.	717.8	.....	67.
3.....	811.6	74.	814.9	815.7	817.2	821.1	821.	74.8	820.4	820.7	822.7	823.5	75.5
4.....	876.6	77.1	876.7	876.3	875.2	875.3	876.3	77.6	876.2	877.	877.	877.6	78.5
5.....	685.7	62.6	682.5	680.3	677.5	676.1	672.9	61.9	671.1	667.7	666.1	664.8	61.3
6.....	548.7	52.5	547.5	547.4	548.9	546.4	546.6	52.5	545.5	546.4	547.1	546.7	52.5
7.....	808.5	69.4	801.2	803.1	799.6	796.9	795.7	69.2	794.2	793.8	792.5	792.5	69.2
8.....	544.6	52.3	545.5	547.	548.5	550.7	553.2	53.	554.5	558.2	557.8	559.5	53.2
9.....	724.	64.6	722.9	722.4	722.3	723.	723.5	65.5	723.6	724.	726.	727.	66.7
10.....	834.3	74.4	836.5	837.8	840.1	840.7	839.3	73.5	838.7	839.1	839.5	838.3	73.
11.....	813.6	70.4	812.3	811.4	810.3	808.4	808.2	70.2	807.3	805.6	804.	803.	70.
12.....	819.6	71.3	818.	817.8	817.1	819.	815.	70.7	813.7	812.7	811.5	810.3	70.1
13.....	699.5	63.2	696.5	697.	696.5	695.	694.4	63.	693.6	693.2	693.	692.5	63.
14.....	678.5	62.4	677.5	678.5	678.7	680.8	681.3	62.8	680.2	680.4	680.	683.	63.
15.....	671.6	60.	669.9	669.	669.9	665.7	663.4	59.8	665.4	664.	662.8	661.	59.8
16.....	666.8	62.2	667.6	670.1	670.1	669.9	670.8	62.2	672.6	673.5	675.	676.6	62.6
17.....	.....	68.	.....	.....	.....	710.4	678.3	68.2	672.2	.....	.....	702.5	68.2
18.....	571.9	58.4	572.7	571.4	569.	567.9	565.3	58.	564.6	563.9	564.2	563.4	58.
19.....	676.9	64.7	675.7	673.7	673.	674.	672.8	64.3	671.2	670.9	668.6	666.5	64.
20.....	611.3	60.	610	611.	606.9	605.	603.7	60.5	603.4	603.2	603.5	603.5	60.5
21.....	615.7	62.6	616.2	614.1	612.3	613.1	612.8	62.4	612.9	611.9	612.6	612.3	62.
22.....	603.2	61.	603.2	602.9	603.3	602.7	603.	61.1	602.7	602.3	602.3	602.7	61.
23.....	690.5	63.2	690.2	678.7	679.7	677.3	677.3	63.2	677.1	675.7	674.1	671.9	63.1
24.....	590.2	60.8	594.3	528.8	532.3	537.1	542.1	60.8	547.	552.2	556.5	561.8	62.2
Means.....	692.3	65.	692.3	692.	691.8	692.6	691.	64.7	693.7	691.6	691.8	691.3	64.8
Reduced to 32° Fah.....	249.2		249.1	249.7	250.4	250.4	249.6		249.	250.9	250.8	249.9	

FEBRUARY.]

FIRST MAXIMUM OF HORIZONTAL FORCE.

[1842.]

Göttingen time.....	h. m. 11 32 5 51½	Therm., Fah.	h. m. 11 33 5 57½	h. m. 11 44 6 03½	h. m. 11 50 6 09½	h. m. 11 56 6 15½	h. m. 12 02 6 21½	Therm., Fah.	h. m. 12 08 6 27½	h. m. 12 14 6 33½	h. m. 12 20 6 39½	h. m. 12 26 6 45½	Therm., Fah.
Feb. 1.....	554.	62.3	554.2	554.5	557.9	553.6	553.8	62.3	553.7	551.1	519.8	548.4	61.8
2.....	562.7	60.4	554.	549.1	518.2	517.1	546.1	60.5	549.8	553.7	567.	566.1	60.7
3.....	592.9	69.6	593.3	595.4	598.4	598.2	596.2	69.6	598.7	598.8	592.	601.1	60.6
4.....	616.5	76.	616.2	616.8	616.5	615.3	615.7	75.5	617.4	619.	618.9	617.6	75.5
5.....	587.2	65.7	587.7	587.	588.	584.9	584.8	64.2	585.5	584.1	582.9	583.3	63.
7.....	568.8	52.7	569.1	567.9	567.5	571.	569.3	52.5	567.8	571.7	571.8	571.1	52
8.....	574.2	65.5	576.5	577.	570.6	573.4	573.6	65.3	573.2	573.	576.3	571.8	64.5
9.....	614.2	41.	614.1	611.4	612.7	614.	611.4	41.	611.	610.9	609.8	609.	44.
10.....	541.6	59.2	541.9	540.9	544.7	545.	546.6	59.4	550.9	550.9	550.8	553.4	59.
11.....	558.	66.7	556.3	559.	558.1	553.	556.2	67.	554.7	553.3	554.7	553.	67.3
12.....	599.3	68.	599.6	596.4	602.2	600.8	601.4	68.	600.	602.2	603.2	601.8	68.
14.....	580.4	67.4	578.7	581.1	581.5	580.2	579.	67.5	581.4	581.7	576.8	583.2	67.5
15.....	598.	54.8	598.7	598.2	541.2	539.1	540.7	54.9	539.5	540.5	540.7	539.2	55.3
16.....	660.5	58.6	662.3	640.	560.5	569.9	563.3	58.4	562.6	562.9	561.2	560.	58.
17.....	544.3	51.	542.5	543.9	547.7	552.9	555.	51.1	553.3	553.8	557.	557.5	51.2
18.....	541.5	52.3	533.2	540.1	541.	537.6	534.7	52.8	530.8	532.6	531.2	531.9	53.5
19.....	603.2	61.6	605.5	601.	605.2	603.4	605.	64.7	606.6	606.3	607.	606.3	65.
21.....	542.2	51.4	540.3	540.8	540.6	541.2	512.6	51.3	541.5	539.8	543.4	542.6	51.4
22.....	550.1	58.9	552.3	552.7	550.8	549.3	549.8	59.	549.5	554.9	553.5	552.7	58.8
23.....	551.3	56.7	553.6	550.7	547.7	549.6	552.	56.	551.8	550.6	550.	551.1	56.
24.....	536.	58.5	536.	533.8	546.2	544.3	545.	58.7	546.2	545.9	545.7	545.3	58.8
25.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
26.....	597.5	63.8	592.6	584.9	590.9	584.6	588.8	63.8	590.	579.5	580.5	583.1	58.3
28.....	543.4	50.2	539.5	535.8	536.7	537.	531.3	51.	535.7	534.1	537.4	536.6	51.8
Means.....	562.6	59.6	562.9	561.8	562.8	562.4	562.8	59.9	563.1	564.1	564.5	564.6	59.8
Reduced to 32° Fah.....	488.1		487.7	487.	487.9	487.3	487.5		487.9	489.	489.5	489.6	

FEBRUARY.]

SECOND MAXIMUM OF HORIZONTAL FORCE.

[1942.]

Göttingen time Observatory time	h. m. 21 02 15 21½	Therm., Fah.	h. m. 21 09 15 27½	A. m. 21 14 15 33½	A. m. 21 20 15 38½	A. m. 21 26 15 45½	h. m. 21 32 15 51½	Therm., Fah.	h. m. 21 38 15 57½	A. m. 21 44 16 03½	h. m. 21 50 16 09½	h. m. 21 56 16 16½
Feb. 1	560.7	61.	560.7	558.2	558.5	554.4	559.9	61.	552.2	551.8	553.9	552.2
2	574.8	66.	575.6	571.8	572.3	570.6	565.4	65.	568.	570.7	572.3	572.
3	619.7	71.3	616.5	615.9	615.4	613.	611.4	71.3	609.5	612.5	608.8	609.2
4	638.	74.	639.	638.6	634.4	632.4	622.3	74.	631.7	630.	619.7	619.6
5	664.	66.	663.4	662.9	662.5	661.1	659.7	65.9	658.1	656.5	656.	655.9
7	593.6	62.	588.4	578.	585.	585.	597.8	62.1	610.5	615.2	614.7	618.2
8	569.2	60.8	567.5	565.2	567.	564.7	564.7	60.4	560.5	559.5	562.	559.2
9	537.3	54.	538.2	539.1	539.4	539.	539.7	53.6	537.9	538.8	537.8	535.
10	570.7	66.	569.4	568.6	569.2	570.6	567.8	66.	568.8	567.2	566.2	565.3
11	.....	.....	.....	.....	.....	596.6	593.9	67.5	592.3	591.1	599.8	607.
12	597.5	67.8	596.5	594.	593.5	599.5	593.2	67.8	594.7	597.1	598.8	602.9
14	604.9	64.	613.5	610.8	603.1	598.9	600.6	64.3	601.7	597.	586.4	586.2
15	560.7	59.9	551.1	552.2	550.1	548.2	547.3	59.5	547.6	550.	549.7	550.8
16	558.5	61.5	561.7	564.5	564.8	548.1	552.4	61.	539.5	554.6	566.4	565.9
17	535.2	49.3	536.7	538.2	538.	539.2	540.	49.7	537.2	536.5	537.	536.2
18	595.2	56.6	596.5	604.4	592.1	590.	587.1	56.6	594.8	597.8	590.8	590.
19	578.3	64.	581.5	579.4	574.9	574.7	568.7	64.3	571.2	565.9	565.	567.1
21	566.8	56.6	564.1	564.3	566.1	565.9	566.8	56.8	565.9	568.5	567.5	563.9
22	568.3	63.5	568.5	570.	569.2	570.	570.	63.4	569.5	568.4	567.4	567.4
23	554.3	59.	554.	553.6	557.7	554.7	557.	59.	556.7	556.4	556.4	556.9
24	645.2	63.4	647.5	640.6	633.7	639.	626.9	63.5	621.7	621.7	644.9	641.2
25	575.4	59.4	575.4	575.2	575.3	575.8	576.1	59.6	577.8	591.8	596.4	595.8
26	590.7	62.	589.5	588.1	588.	588.6	580.	62.1	587.7	588.5	589.6	585.2
28	570.7	68.2	573.6	570.	569.8	574.4	570.5	70.	568.2	564.6	564.7	563.7
Means	578.7	62.	579.1	577.5	576.5	576.1	576.5	62.3	575.1	577.2	577.9	577.8
Reduced to 32° Fah.	497.7		498.1	496.4	495.4	494.4	493.7		493.3	495.5	496.2	496.2

Feet/Sec.]

SECOND MAXIMUM OF HORIZONTAL FORCE—Continued.

[1949.

[97]

634

Göttingen time Observatory time	h. m. 22 02 16 21½	Therm., Fah.	h. m. 22 08 16 27½	h. m. 23 14 16 33½	h. m. 23 20 16 39½	h. m. 22 26 16 45½	h. m. 22 32 16 51½	Therm., Fah.	h. m. 22 38 16 57½	h. m. 23 44 17 03½	h. m. 23 50 17 09½	h. m. 22 56 17 15½	Therm., Fah.
Feb. 1	550.3	60.7	549.6	554.6	551.7	552.4	540.2	60.3	540.2	541.2	547.	543.5	60.
2	568.9	66.	563.	566.5	566.6	566.5	567.	66.	568.2	570.6	570.	569.3	66.
3	606.	71.	604.7	611.8	606.	603.7	605.5	71.	610.4	611.9	610.2	607.5	71.
4	619.5	73.3	618.3	617.1	619.4	622.6	627.2	73.	634.6	641.7	644.3	644.	73.
5	656.1	55.5	557.6	559.7	560.3	562.8	564.9	55.	563.2	563.5	562.1	560.	54.8
7	601.1	62.	592.8	593.9	595.8	605.7	608.	62.	607.7	602.	605.	607.7	62.
8	561.1	59.8	569.9	561.5	562.	557.5	560.2	59.	561.	564.	574.7	580.5	59.4
9	536.	53.2	537.	536.7	536.8	536.8	536.3	53.	536.7	536.2	535.2	534.2	53.
10	563.9	66.	566.1	566.8	566.	565.8	565.	66.	566.	564.6	566.7	565.5	66.
11	608.9	67.	605.	605.1	608.7	607.9	606.2	66.6	605.8	604.	606.7	607.	66.
12	600.4	67.5	598.2	598.7	596.3	596.1	596.2	68.	594.	594.2	594.	591.1	68.5
14	586.1	64.6	585.4	583.6	583.	579.5	579.	64.3	577.7	577.4	577.5	577.	64.3
15	551.6	59.4	554.2	552.9	553.2	551.4	545.5	59.2	554.5	557.	559.1	558.	59.2
16	559.4	60.6	571.1	569.4	568.7	569.1	567.2	60.	559.	560.4	559.6	557.7	59.6
17	537.5	49.8	534.9	539.	540.3	541.	547.3	49.7	534.	538.3	540.7	540.7	49.7
18	590.4	56.7	602.2	607.3	597.2	594.	600.2	56.7	599.	606.4	599.1	599.1	56.6
19	571.4	64.7	571.6	572.7	568.7	571.3	573.2	64.9	568.1	570.7	564.9	567.	65.1
21	562.1	57.	560.3	559.5	560.3	568.	568.1	57.2	559.8	566.	566.7	566.8	57.
22	566.9	63.4	567.8	567.3	567.3	564.5	567.7	63.9	566.1	566.9	566.6	567.3	63.8
23	553.9	59.	554.4	554.3	555.4	555.6	556.	58.7	554.6	554.3	553.6	554.6	58.6
24	549.7	63.6	545.6	546.5	546.6	543.4	544.7	63.7	546.2	546.1	545.	546.8	63.8
25	593.5	59.8	589.	582.3	581.	573.3	574.8	59.8	575.4	575.3	574.4	575.4	59.9
26	586.2	62.2	585.3	587.9	587.2	587.	588.1	62.3	588.1	587.3	587.8	586.4	62.4
28	563.5	70.8	563.3	563.7	563.2	559.2	566.2	71.8	567.	565.6	576.	569.3	71.2
Means	576.9	62.2	576.2	577.4	577.1	575.9	575.2	62.1	574.7	575.7	578.7	577.8	62.
Reduced to 32° Fah	495.4		494.9	496.	493.7	494.6	493.9		492.9	494.5	495.6	496.8	

[1942.]

FIRST MINIMUM OF HORIZONTAL FORCE.

FEBRUARY.]

	A. m. 1 03 19 21½	Therm., Feb.	A. m. 1 08 19 27½	A. m. 1 14 19 33½	A. m. 1 20 19 39½	A. m. 1 26 19 45½	A. m. 1 32 19 51½	Therm., Feb.	A. m. 1 38 19 57½	A. m. 1 44 20 03½	A. m. 1 50 20 09½	A. m. 1 56 20 15½
Gliding time.....												
Observatory time.....												
Feb. 1	574.6	60.8	579.1	580.5	580	582.7	589	61.	590	593.2	592.3	595.9
2	578.2	65.1	578	577.2	576.2	574.9	575.8	65.1	576.7	578.2	581.7	580.
3	607.9	70.5	608.4	608.3	609.3	607.5	609.2	70.7	608.8	607.3	602.1	603.1
4	619.7	71.8	618.7	618.4	622.6	621.7	621.	71.8	620.3	621.	620.	620.6
5	555.8	53.3	558.2	556.1	555.8	564.9	556.	52.6	555.6	554.9	554.7	555.
6	613.9	65.5	609.3	606.	603.	603.	599.5	65.1	597.8	597.2	596.1	596.
7	564.8	56	566.1	564.9	564.6	562.	563.2	54.7	560.8	557.	554.	555.9
8	533.6	53.8	532.8	533.6	534.5	533.	536.	54.	538.3	535.3	537.3	537.4
9	.....	64.	.....	566.3	566.4	566.1	568.1	64.	570.1	571.1	571.5	571.1
10	.....	64.9	641.3	635.4	633.6	634.	634.5	64.8	639.5	641.5	645.5	646.3
11	640.2	66	594.3	592.5	592.2	592.6	592.	66.	592.3	593.1	593.5	593.6
12	591.5	58.3	567.3	566.8	562.7	562.8	558.5	57.8	562.	565.3	564.5	561.
13	566.2	58.3	553.2	554.	552.2	551.5	553.2	58.8	553.9	553.3	555.1	555.5
14	552.3	59	578.2	579.6	580.3	584.1	568.7	58.5	602.	614.3	627.4	641.
15	573.1	46.9	535.2	536.7	536.4	533.5	532.4	46.9	534.	535.3	538.8	537.
16	537.	58.8	589.7	581.4	583.8	584.3	585.5	59.7	585.4	583.8	585.2	582.
17	591.1	56.4	580.5	581.9	583.5	583.3	581.	57.1	578.1	578.3	580.1	577.6
18	583.8	60.2	559	557.	555.9	556.3	554.7	60.2	557.3	558.9	559.	558.7
19	568.1	61.9	570.3	570.3	570.8	572.	572.2	61.2	572.3	570.4	568.8	568.5
20	570.	62.4	649.3	632.2	619.3	665.	668.7	62.4	666.8	656.	654.6	660.4
21	557.5	59.3	562.4	561.7	577.6	580.	581.1	59.7	584.2	583.	585.1	582.3
22	576.	61.1	569.9	567.3	587.5	592.1	596.1	61.1	594.7	599.8	598.4	597.
23	564.2	69.	582.3	584.	585.2	582.5	586.3	68.9	591.5	598.3	604.4	603.
24	591.6											
25	581.5											
26												
27												
28												
Means.....	582.8	60.9	581.5	579.3	578.8	580.7	581.8	60.8	582.9	583.6	584.6	585.2

FEBRUARY.]

FIRST MINIMUM OF HORIZONTAL FORCE—Continued.

[1842.]

[97]

636

Göttingen time. Observatory time.	h. m. 2 02 20 21.4	Therm., Feb.	h. m. 2 08 20 27.4	h. m. 2 14 20 33.4	h. m. 2 20 20 39.4	h. m. 2 26 20 45.4	A. m. 2 32 20 51.4	Therm., Feb.	h. m. 2 38 20 57.4	A. m. 2 44 21 03.4	h. m. 2 50 21 09.4	h. m. 2 56 21 15.4	Therm., Feb.
Feb. 1	590.6	60.3	587.3	583.8	580.6	576.7	573.	61.	570.1	570.5	566.2	564.1	61.
2	580.8	65.4	580.6	581.1	582.1	582.7	581.6	66.8	582.	591.5	580.	580.6	66.9
3	602.1	71.4	605.4	605.5	603.3	602.3	606.7	72.	607.5	608.	608.8	610.1	72.3
4	621.7	71.6	620.3	621.	617.5	617.7	617.8	71.	615.9	615.	615.7	615.7	71.
5	566.	52.	555	556.1	556.1	556.9	556.2	51.9	555.3	555.8	555.6	555.6	51.7
6	603.8	65.	598.5	599.5	598.2	597.4	596.4	65.	595.3	595.7	596.6	596.7	65.
7	549.7	53.	548.1	546.5	546.8	546.4	548.6	52.6	548.1	547.	545.2	544.5	52.
8	537.7	53.5	540.2	539.4	539.	537.4	537.8	52.7	539.4	537.1	538.2	538.5	51.4
9	571.3	63.5	571.2	570.9	573.7	571.8	572.3	63.	571.5	572.2	573.1	573.1	62.6
10	646.5	64.6	646.9	647.	649.5	652.7	654.3	63.7	650.6	648.2	650.1	650.4	63.5
11	592.	56.	594.4	594.2	593.1	592.4	593.1	66.	594.	595.	597.1	598.9	66.
12	552.4	57.4	567.	567.7	574.	571.	569.4	56.7	571.	569.4	574.9	573.2	56.2
13	568.5	58.8	565.6	567.8	565.5	565.8	567.1	58.8	566.1	566.5	566.1	566.8	58.8
14	652.6	58.	657.3	664.7	667.	661.	649.2	57.2	647.3	644.1	643.4	634.5	57.
15	542.7	47.	541.6	540.5	540.5	541.8	543.5	47.5	542.6	542.3	540.	542.	47.7
16	594.3	60.6	596.2	593.	594.9	595.6	595.1	60.4	597.	612.4	612.7	610.7	60.4
17	575.2	55.8	569.4	561.4	562.8	563.3	567.	54.9	565.9	558.9	560.	561.	54.
18	568.2	59.6	568.5	569.8	569.6	567.6	561.8	59.4	561.	569.8	560.3	559.6	59.2
19	583.8	60.4	583.9	582.6	583.9	585.3	587.5	59.8	588.2	587.	587.5	588.4	59.8
20	562.2	56.	564.6	566.	565.8	566.	565.7	55.4	564.2	563.4	561.4	560.8	55.
21	655.	61.4	654.9	665.1	664.4	661.5	640.6	60.9	642.6	652.	647.8	642.7	60.5
22	592.	60.2	590.	594.5	590.2	590.2	593.4	60.8	589.8	587.9	594.4	588.8	61.
23	594.3	60.9	592.2	587.6	585.6	582.3	584.7	60.6	585.2	584.4	586.3	589.8	60.6
24	602.6	63.4	601.6	596.6	594.6	596.7	601.7	63.2	602.4	599.7	594.2	597.6	63.
Means.	585.4	60.5	585.9	585.9	585.5	584.7	584.7	60.2	584.3	584.3	584.3	583.9	60.
Reduced to 32° Feb.	508.3		509.2	509.4	509.2	508.5	508.6		508.3	508.4	508.5	508.3	

February.]

SECOND MINIMUM OF HORIZONTAL FORCE.

[1942.]

Göttingen time. Observatory time	A. m. 15 32 9 54½	Therm., Fah.	A. m. 15 38 9 54½	A. m. 15 44 10 03½	A. m. 15 50 10 09½	A. m. 15 56 10 15½	A. m. 16 02 10 21½	Therm., Fah.	A. m. 16 08 10 27½	A. m. 16 14 10 33½	A. m. 16 20 10 39½	A. m. 16 26 10 45½
Feb. 1	505.9	62.	569.7	572.2	576.5	575.	571.8	61.9	578.9	572.4	574.7	578.6
2	506.2	63.	570.0	572.5	576.8	574.6	577.3	63.	579.7	575.9	578.8	581.
3	506.5	64.	570.3	572.8	577.1	574.9	577.6	64.	580.0	576.2	579.1	581.3
4	506.8	65.	570.6	573.1	577.4	575.2	577.9	65.	580.3	576.5	579.4	581.6
5	507.1	66.	570.9	573.4	577.7	575.5	578.2	66.	580.6	576.8	579.7	581.9
6	507.4	67.	571.2	573.7	578.0	575.8	578.5	67.	580.9	577.1	580.0	582.2
7	507.7	68.	571.5	574.0	578.3	576.1	578.8	68.	581.2	577.4	580.3	582.5
8	508.0	69.	571.8	574.3	578.6	576.4	579.1	69.	581.5	577.7	580.6	582.8
9	508.3	70.	572.1	574.6	578.9	576.7	579.4	70.	581.8	578.0	580.9	583.1
10	508.6	71.	572.4	574.9	579.2	577.0	579.7	71.	582.1	578.3	581.2	583.4
11	508.9	72.	572.7	575.2	579.5	577.3	580.0	72.	582.4	578.6	581.5	583.7
12	509.2	73.	573.0	575.5	579.8	577.6	580.3	73.	582.7	578.9	581.8	584.0
13	509.5	74.	573.3	575.8	580.1	577.9	580.6	74.	583.0	579.2	582.1	584.3
14	509.8	75.	573.6	576.1	580.4	578.2	580.9	75.	583.3	579.5	582.4	584.6
15	510.1	76.	573.9	576.4	580.7	578.5	581.2	76.	583.6	579.8	582.7	584.9
16	510.4	77.	574.2	576.7	581.0	578.8	581.5	77.	583.9	580.1	583.0	585.2
17	510.7	78.	574.5	577.0	581.3	579.1	581.8	78.	584.2	580.4	583.3	585.5
18	511.0	79.	574.8	577.3	581.6	579.4	582.1	79.	584.5	580.7	583.6	585.8
19	511.3	80.	575.1	577.6	581.9	579.7	582.4	80.	584.8	581.0	583.9	586.1
20	511.6	81.	575.4	577.9	582.2	580.0	582.7	81.	585.1	581.3	584.2	586.4
21	511.9	82.	575.7	578.2	582.5	580.3	583.0	82.	585.4	581.6	584.5	586.7
22	512.2	83.	576.0	578.5	582.8	580.6	583.3	83.	585.7	581.9	584.8	587.0
23	512.5	84.	576.3	578.8	583.1	580.9	583.6	84.	586.0	582.2	585.1	587.3
24	512.8	85.	576.6	579.1	583.4	581.2	583.9	85.	586.3	582.5	585.4	587.6
25	513.1	86.	576.9	579.4	583.7	581.5	584.2	86.	586.6	582.8	585.7	587.9
26	513.4	87.	577.2	579.7	584.0	581.8	584.5	87.	586.9	583.1	586.0	588.2
27	513.7	88.	577.5	580.0	584.3	582.1	584.8	88.	587.2	583.4	586.3	588.5
28	514.0	89.	577.8	580.3	584.6	582.4	585.1	89.	587.5	583.7	586.6	588.8
Means	570.2	80.8	574.7	576.7	575.7	575.9	576.6	80.6	577.5	577.6	578.4	580.2
Reduced to 32° Fah.	495.7		497.2	498.2	498.3	498.6	499.4		500.2	500.9	500.9	501.6

FEBRUARY.]

SECOND MINIMUM OF HORIZONTAL FORCE—Continued.

[1842.]

[97]

639

Getting time Observatory time	h. m. 16 33 10 51½	Therm., Fah.	h. m. 16 38 10 57½	h. m. 16 44 11 03½	h. m. 16 50 11 09½	h. m. 16 56 11 15½	h. m. 17 02 11 21½	Therm., Fah.	h. m. 17 08 11 27½	h. m. 17 14 11 33½	h. m. 17 20 11 39½	h. m. 17 26 11 45½	Therm., Fah.
Feb. 1.....	576.5	61.8	577.8	584.6	585.8	585.7	582.4	61.7	581.1	576.7	580.1	577.2	61.6
2.....	603.7	63.	606.4	611.1	615.7	616.3	617.4	63.	617.8	616.3	612.4	611.4	63.
3.....	623.4	72.	625.8	628.7	628.	628.	631.2	72.	630.8	630.9	630.9	631.3	72.
4.....	642.8	77.	643.8	646.	646.5	647.5	649.	75.	648.5	650.5	650.3	651.6	72.
5.....	577.	57.6	578.1	580.1	581.2	581.2	580.4	57.1	580.6	580.7	579.7	580.2	57.
6.....	555.3	52.2	554.	553.3	557.2	557.7	559.	53.	560.5	560.	559.	560.4	54.
7.....	592.	64.5	597.7	599.6	596.5	598.8	607.3	64.7	603.4	603.7	606.5	604.1	55.
8.....	542.1	49.7	543.1	544.	544.9	544.6	546.2	50.4	549.2	550.1	550.7	550.4	51.2
9.....	563.4	61.2	565.9	566.2	569.7	572.3	572.8	61.3	573.1	573.2	574.8	575.2	61.4
10.....	595.5	66.	597.	598.6	600.3	606.	606.	66.	607.	607.1	608.4	608.3	66.
11.....	593.	66.4	593.4	591.3	590.9	591.5	592.1	66.8	592.	590.8	590.4	593.7	70.
12.....	579.5	65.9	582.9	585.8	585.6	588.8	590.8	65.9	592.2	594.2	593.6	593.4	66.1
13.....	546.8	56.6	549.5	550.5	551.5	551.4	552.5	57.4	563.4	566.	566.	560.6	57.7
14.....	596.	59.7	596.4	596.3	597.	597.9	595.9	60.	597.7	597.	596.9	594.8	60.1
15.....	586.2	47.6	543.	548.	548.4	556.2	556.1	47.4	559.5	564.4	566.	564.5	47.8
16.....	576.5	57.3	580.6	581.5	589.9	588.8	597.9	57.3	611.6	605.	605.	606.5	57.4
17.....	607.8	66.3	609.3	609.7	613.8	616.1	618.5	66.	622.1	623.4	629.4	629.2	65.4
18.....	587.8	58.2	580.1	583.2	585.6	586.5	584.5	53.2	565.4	566.5	566.6	566.1	53.5
19.....	556.6	59.3	566.5	567.4	567.4	560.2	559.8	59.	559.3	560.3	569.6	569.5	60.7
20.....	560.4	58.	560.1	559.8	.....	559.8	561.1	58.8	561.9	562.2	560.8	561.3	58.5
21.....	569.5	61.	568.8	571.	573.8	575.5	579.9	61.2	569.1	593.9	594.4	599.1	61.4
22.....	590.7	59.4	596.3	596.8	595.7	586.	586.	59.8	583.8	583.7	581.7	581.7	60.1
23.....	511.1	61.	613.1	611.4	608.7	610.3	612.2	60.7	611.5	611.3	614.2	612.9	61.
24.....	543.	61.8	582.7	584.3	586.1	587.4	586.5	62.1	586.4	589.4	586.3	583.	62.3
Means.....	560.7	60.8	582.2	583.6	586.	586.4	587.4	60.8	589.	588.7	589.7	589.8	61.
Reduced to 32° Fah.....	502.9		504.4	505.8	506.	508.6	509.6		511.	510.1	511.5	511.5	

[1832.]

FIRST MAXIMUM OF DECLINATION.

MARCH.]

	<i>h. m.</i> 6 00 0 19½	<i>h. m.</i> 6 06 0 25½	<i>h. m.</i> 6 12 0 31½	<i>h. m.</i> 6 18 0 37½	<i>h. m.</i> 6 24 0 43½	<i>h. m.</i> 6 30 0 49½	<i>h. m.</i> 6 36 0 55½	<i>h. m.</i> 6 42 1 01½	<i>h. m.</i> 6 48 1 07½	<i>h. m.</i> 6 54 1 13½
Göttingen time										
Observatory time										
Mar. 1	569.7	571.5	570.	569.3	569.	567.8	566.3	565.5	565.4	565.3
2	563.2	563.4	564.	564.1	566.	565.2	564.9	563.9	563.9	565.3
3	568.9	568.5	567.4	566.6	566.3	566.4	566.2	566.	566.2	566.3
4	564.2	563.3	563.7	562.2	561.9	561.7	561.3	560.7	560.2	560.2
5	564.3	564.7	567.3	567.7	570.4	568.6	567.1	567.3	566.3	566.
6	559.2	561.9	569.1	561.	561.8	563.5	563.1	564.	563.1	563.2
7	564.3	563.3	565.	564.3	563.7	562.1	562.6	562.2	563.1	563.1
8	565.2	565.7	566.1	566.7	566.5	566.	566.6	566.6	566.4	567.1
9	567.7	568.	567.4	568.2	568.9	568.7	569.1	567.9	567.8	567.4
10	565.3	565.3	567.9	566.6	565.4	565.4	565.2	564.4	565.3	565.3
11	567.5	567.9	568.1	567.2	567.7	566.	567.2	566.4	566.7	568.3
12	569.9	567.6	566.3	566.1	566.1	566.5	568.	565.8	566.5	567.
13	563.9	566.	568.1	574.8	568.6	566.8	562.7	566.6	564.9	566.2
14	561.7	563.8	564.4	561.7	561.8	563.6	563.2	563.6	563.1	562.7
15	576.6	577.5	574.8	574.7	574.5	572.4	571.8	574.5	568.1	568.5
16	562.3	564.3	562.7	563.1	562.2	563.6	564.6	563.1	563.2	562.8
17	566.8	566.	567.3	574.9	567.6	566.6	563.7	564.3	565.4	564.8
18	565.7	567.	567.3	567.4	568.8	569.6	571.3	571.5	571.7	569.2
19	563.5	564.4	563.2	563.5	561.7	563.6	563.2	563.5	563.4	563.7
20	569.8	570.8	569.	567.4	567.1	568.7	568.	567.2	566.6	566.4
21	564.9	563.5	564.5	565.3	565.5	565.3	565.	566.5	566.3	566.1
22	562.8	561.9	564.3	564.	561.9	563.6	561.9	562.4	563.6	561.7
23	558.7	567.6	558.4	559.1	558.1	568.3	559.1	568.4	568.1	568.3
24	569.	572.4	579.	576.7	575.6	571.5	569.9	567.1	564.	565.3
25	560.4	560.3	560.6	560.	560.3	560.1	560.1	560.8	560.8	560.5
26	569.2	569.8	569.2	569.5	567.3	566.4	563.	569.6	568.4	569.8
27	568.3	568.1	569.3	565.9	566.4	568.1	567.8	568.	566.1	566.5
Means	566.2	566.7	566.1	566.2	566.5	565.3	564.9	564.9	564.5	564.5

FIRST MAXIMUM OF DECLINATION—Continued.

MAJOR.]

Gettysburg time. Observatory time	A. m. 7 00. 1 19½	h. m. 7 06. 1 25½	h. m. 7 12. 1 31½	h. m. 7 18. 1 37½	h. m. 7 24. 1 43½	h. m. 7 30. 1 49½	h. m. 7 36. 1 55½	h. m. 7 42. 2 01½	h. m. 7 48. 2 07½	h. m. 7 54. 2 13½
Mar. 1	565.5	564.8	565.9	566.1	566	565.3	563.9	563.5	562.7	563
2	567.3	566.5	565.3	565.3	565.2	565.1	566.8	567.6	566.4	566.2
3	565.9	565.8	566	566.9	566.5	565.9	565.7	565.1	564.9	565
4	562	563.9	565.1	564.8	566.5	567.9	568.5	569.2	568.7	568.3
5	565.3	566.7	564.3	566.1	551.7	553.7	557.7	561.5	563.3	563.7
6	562.5	560.5	569.1	569.5	560	560.7	561.6	562.8	563	564.2
7	564.3	564.8	566.1	566	566.6	566.6	568.4	566	565.5	565
8	565.9	566.2	566.2	566.4	566	566.5	566.4	566.6	566.6	567.1
9	567.7	568	567	566.9	566.3	565.8	566.7	565.9	565.9	565.9
10	565.2	565.2	565	564.9	564.7	565.2	564.6	564.1	564.9	564.3
11	566.7	565.2	564.3	564.7	565.6	566.8	565	564.3	563.2	567.3
12	566.8	566.9	565.1	565.2	563.2	565.1	563.6	566.7	566.1	566.9
13	565.1	566.5	563.5	563.2	565.9	566.2	565.3	563	564.3	564.8
14	562.5	563.3	564.5	562.8	563.7	563.2	563.8	566.5	563.3	564.5
15	566.8	567.3	566.4	565.6	565.9	567	566.7	559.4	563.4	565.1
16	562.7	561.7	561.9	562.2	561.5	560.9	562.1	561.3	563.9	561.2
17	565	564.9	565	563.5	563.8	565.8	566.5	566	565.8	565.9
18	569	568.5	567.3	567.7	566.3	564.2	564.4	564.7	564.2	564.2
19	562.5	563.4	564.4	563.7	564.1	563.7	564.2	564.2	564.4	564.1
20	566.6	566.2	566	563.6	564.9	565.5	564.8	564.3	564.3	564
21	565.7	564.3	565.2	564	561.7	560.3	561.5	560.3	561.5	558.4
22	561.9	561.7	561.4	562.5	562.2	562.4	563.1	564.1	565.1	565.4
23	558.4	558.7	558.6	558.5	558	558.1	558.6	558.6	558.1	558.5
24	566	567.2	565.3	567.7	568.5	569.5	568.4	567.9	568.8	568.2
25	559.8	560.4	560	560.3	559.2	559.4	559.7	559.6	559.6	559.6
26	571.1	572.4	574.3	574.6	573.5	570.7	571.2	570.5	569.9	567.7
27	564.6	554.6	565.9	555.6	563.7	564.4	554.5	554.2	552.6	557
Means	565.3	564.6	564.6	564.4	563.6	563.9	561.1	564.1	564.4	564.2

MARCH.]

SECOND MAXIMUM OF DECLINATION.

[1942.]

Göttingen time. Observatory time.	h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.	
	16 00	12 19½	18 06	12 25½	16 12	12 31½	18 18	12 37½	16 24	12 43½	18 30	12 49½	16 36	12 55½	18 42	13 01½	16 48	13 07½
∞ Mat. 1	558.9		558.4		559.3		558.7		558.9		559.7		558.1		559.2		558.2	
2	561.8		561.5		561.		561.4		560.7		560.4		559.8		559.7		558.8	
3	558.7		558.2		558.2		557.6		557.2		557.3		557.4		557.2		556.6	
4	559.4		558.9		558.8		558.3		557.7		557.9		557.5		557.4		556.9	
5	554.3		554.2		554.		554.3		554.3		555.4		555.3		556.1		557.	
6	555.6		555.4		555.4		555.3		554.6		555.		554.6		555.1		554.9	
7	553.8		553.7		555.4		554.5		557.		554.7		555.1		555.5		556.1	
8	554.		554.1		553.		552.7		555.1		553.4		553.5		553.8		555.5	
9	560.7		560.2		560.2		559.5		557.9		558.8		557.9		557.2		556.2	
10	558.3		558.1		557.5		557.9		557.4		557.5		557.		557.7		557.1	
11	557.5		556.3		557.1		555.9		555.8		554.7		555.		554.4		553.1	
12	558.9		558.5		558.1		557.3		556.7		556.		555.5		555.3		554.3	
13	557.1		556.		555.9		553.7		556.7		553.4		553.9		552.8		547.2	
14	557.8		556.1		555.		553.5		551.5		550.9		549.2		547.8		543.4	
15	559.2		558.4		560.3		557.6		558.4		555.7		556.		556.3		556.	
16	558.9		555.7		553.8		554.3		554.3		554.3		553.3		553.4		552.7	
17	552.7		552.2		551.5		551.		551.8		551.		550.3		549.4		549.1	
18	556.6		557.		556.5		556.6		556.7		556.7		556.6		556.7		557.2	
19	549.8		549.4		549.5		549.1		549.		549.		549.2		549.1		549.3	
20	552.2		552.		551.7		552.3		551.7		551.5		551.		550.7		551.3	
21	552.2		553.1		553.1		552.4		550.7		550.8		551.		550.		549.3	
22	553.		552.6		551.		551.		550.3		550.2		550.2		550.2		550.2	
23	553.2		553.4		553.1		550.6		550.		550.		549.1		549.3		548.1	
24	549.		548.4		548.9		548.2		547.9		547.9		547.5		547.		546.5	
25	549.1		548.4		547.5		546.8		544.4		543.5		542.4		541.4		540.3	
26	556.7		556.7		556.1		554.3		549.1		547.		543.4		543.4		544.3	
27	553.3		553.9		553.4		553.3		553.1		552.7		552.7		552.9		552.4	
28	555.7		556.7		555.1		554.4		554.		553.5		552.9		552.9		552.2	
29	555.7		556.7		555.1		554.4		554.		553.5		552.9		552.9		552.2	
30	555.7		556.7		555.1		554.4		554.		553.5		552.9		552.9		552.2	
31	555.7		556.7		555.1		554.4		554.		553.5		552.9		552.9		552.2	
Means.	555.7		556.7		555.1		554.4		554.		553.5		552.9		552.9		552.2	

[1842.]

FIRST MINIMUM OF DECLINATION.

MARON.]

	<i>h. m.</i> 2 00 20 19½	<i>h. m.</i> 2 06 20 25½	<i>h. m.</i> 2 12 20 31½	<i>h. m.</i> 2 18 20 37½	<i>h. m.</i> 2 24 20 43½	<i>h. m.</i> 2 30 20 49½	<i>h. m.</i> 2 36 20 55½	<i>h. m.</i> 2 42 21 01½	<i>h. m.</i> 2 48 21 07½	<i>h. m.</i> 2 54 21 13½
<i>Greenwich time</i>										
<i>Observatory time</i>										
Mar. 1.....	566.	566.	565.9	565.9	565.9	566.1	565.2	565.3	565.3	565.3
2.....	564.6	564.9	563.8	565.	564.5	566.	565.5	564.8	564.8	565.6
3.....	562.9	563.	562.5	561.6	561.8	561.1	562.	561.4	561.6	561.
4.....	563.	562.7	563.4	564.2	564.5	565.4	565.1	564.7	563.7	564.2
5.....	569.1	568.6	566.5	564.	563.7	567.2	567.	567.4	567.7	568.3
6.....	575.	574.	572.6	567.7	568.5	570.5	568.7	568.7	567.4	567.4
7.....	563.8	564.5	563.7	564.5	568.2	568.9	565.9	566.4	566.7	567.
8.....	565.	565.1	566.2	568.	565.	564.5	564.5	567.	568.	572.1
9.....	566.4	566.	566.2	564.5	565.7	566.	566.1	566.	566.9	566.8
10.....	565.3	564.6	565.8	564.8	565.5	568.4	567.1	565.2	565.9	566.2
11.....	566.1	568.	564.3	565.2	564.4	566.1	566.9	567.7	568.8	567.7
12.....	564.	564.7	563.5	563.	562.5	561.7	564.6	565.1	567.	567.6
13.....	564.7	562.6	562.6	566.3	568.	564.8	568.1	566.	568.6	567.3
14.....	578.2	580.5	577.2	574.9	569.	580.2	589.5	577.2	566.8	572.
15.....	561.4	561.8	561.2	561.	561.	564.2	558.7	553.7	553.8	562.
16.....	562.4	562.2	562.3	562.	562.	561.7	562.2	561.9	562.1	561.9
17.....	561.4	561.4	562.	561.9	562.8	562.7	562.7	563.3	560.7	561.3
18.....	563.7	561.6	561.7	561.3	561.3	562.9	562.5	562.4	562.7	562.4
19.....	559.4	559.5	559.1	559.7	560.5	560.1	561.	562.7	562.5	562.5
20.....	567.9	564.4	562.4	563.9	562.1	562.4	560.3	560.5	560.2	562.5
21.....	571.	570.2	567.9	566.	565.5	566.2	564.9	564.1	563.7	562.
22.....	565.3	565.	564.5	564.3	563.7	562.5	561.6	561.5	561.	562.3
23.....	568.2	561.3	560.	560.9	560.8	560.9	560.7	560.4	560.3	560.3
24.....	562.	561.3	560.9	560.1	560.1	560.8	560.7	560.8	561.3	561.3
25.....	567.5	566.6	565.7	564.5	562.7	564.1	566.7	567.3	564.9	564.9
26.....	556.	557.2	558.5	559.	558.8	559.7	560.4	562.5	567.5	564.4
27.....	556.	556.2	556.	555.	556.	556.9	556.8	557.3	556.6	558.7
28.....										
29.....										
30.....										
31.....										
Mean.....	564.6	564.6	563.9	563.7	563.3	564.4	564.6	564.2	564.2	564.4

March.]

FIRST MINIMUM OF DECLINATION—Continued.

[1842.

Göttinger time Observatory time.	<i>h. m.</i> 3 00 21 19½	<i>h. m.</i> 3 06 21 26½	<i>h. m.</i> 3 12 21 31½	<i>h. m.</i> 3 18 21 37½	<i>h. m.</i> 3 24 21 43½	<i>h. m.</i> 3 30 21 49½	<i>h. m.</i> 3 36 21 55½	<i>A. m.</i> 3 42 22 01½	<i>h. m.</i> 3 48 22 07½	<i>h. m.</i> 3 54 22 13½
Mar. 1	565.1	565.7	564.9	565.4	565.4	565.7	565.5	565.5	565.	565.6
2	565.7	565.5	565.7	566.2	566.1	565.9	565.8	565.5	565.	565.1
3	561.	563.1	562.6	565.2	564.6	564.1	563.7	563.3	563.6	563.4
4	563.2	563.9	562.1	562.5	562.2	562.9	563.5	565.2	565.8	565.
5	565.9	563.5	560.5	567.6	569.	567.6	563.2	561.5	561.5	563.4
6	565.	563.2	563.9	564.5	566.5	568.	570.1	569.4	568.2	568.3
7	566.	566.	566.	566.8	565.9	565.	565.2	565.3	565.8	564.9
8	571.9	571.7	572.3	573.6	574.6	572.4	569.9	567.5	566.5	566.4
9	567.2	567.	566.8	566.8	566.7	566.7	566.4	566.	566.5	566.5
10	561.5	567.1	566.2	564.9	567.6	565.8	564.5	565.2	566.3	565.8
11	567.4	567.1	567.6	567.4	563.7	566.1	566.1	566.2	570.5	568.8
12	565.5	564.	564.7	564.	563.5	563.	563.6	564.5	564.4	570.5
13	567.3	564.5	569.	566.5	564.7	563.7	563.	564.	561.6	565.4
14	579.3	592.9	585.5	574.2	577.8	578.5	587.2	583.8	572.8	569.8
15	568.3	560.6	558.8	558.6	558.7	560.4	560.	560.8	560.	562.6
16	561.8	562.2	562.2	562.3	562.3	562.1	562.5	562.3	562.4	562.
17	563.7	564.1	563.5	563.1	561.9	562.2	563.	561.8	562.8	562.
18	562.5	561.8	562.	562.4	561.1	559.9	559.9	560.5	562.6	562.3
19	563.7	561.9	561.6	561.2	560.3	560.2	560.3	561.	561.1	561.2
20	559.	559.4	559.4	554.7	558.5	559.7	559.7	561.2	560.3	562.1
21	561.6	562.	563.2	562.7	562.3	562.5	564.	564.5	568.5	568.4
22	561.7	562.9	572.6	569.2	565.8	564.4	562.6	562.5	564.2	561.8
23	561.1	560.8	560.2	559.5	558.4	558.4	558.8	558.8	559.1	566.5
24	562.2	562.8	564.	564.5	566.9	568.6	555.3	542.3	561.6	561.6
25	568.8	568.6	569.6	569.6	565.8	569.3	579.9	577.3	577.3	573.3
26	564.1	567.2	570.4	571.2	568.5	566.7	565.1	567.3	569.2	569.5
27	561.6	562.5	563.2	561.4	561.9	559.5	559.	559.4	559.	566.5
Means	564.6	565.2	565.4	564.7	564.3	564.8	565.3	565.7	566.5	566.

MARCH.]

SECOND MINIMUM OF DECLINATION.

[1842.]

[97]

644

Göttingen time. Observatory time.	h. m. 13 00 7 19½	h. m. 13 06 7 25½	h. m. 13 12 7 31½	h. m. 13 18 7 37½	h. m. 13 24 7 43½	h. m. 13 30 7 49½	h. m. 13 36 7 55½	h. m. 13 42 8 01½	h. m. 13 48 8 07½	h. m. 13 54 8 13½
Mar. 1	572.	571.9	572.	572.	572.	573.1	572.9	573.	573.4	573.7
2	562.7	562.7	562.7	562.1	562.7	562.4	561.2	561.	560.8	562.7
3	570.1	570.	570.2	570.5	570.2	570.9	570.	570.7	572.8	571.8
4	567.2	567.	566.7	567.1	567.2	567.9	567.3	566.	567.1	568.
5	572.5	572.2	572.	572.6	572.3	572.3	572.2	572.2	572.6	572.
6	567.6	567.2	567.6	568.	568.4	569.9	570.	567.5	568.9	575.4
7	570.8	572.1	570.9	570.5	575.5	571.5	572.3	572.2	572.4	571.6
8	573.1	569.	576.5	576.7	572.	573.2	572.8	574.5	572.7	575.2
9	573.1	569.1	570.6	569.8	571.	573.3	568.	572.1	571.7	571.2
10	568.	569.1	570.6	572.	572.1	570.6	571.9	571.5	571.5	571.5
11	572.2	571.9	572.4	572.	568.4	569.2	569.3	570.7	576.	573.
12	571.4	570.2	567.7	571.2	568.4	569.2	569.3	570.7	572.2	575.4
13	571.6	572.6	572.7	575.7	575.2	576.4	576.2	575.	572.2	575.4
14	570.4	572.2	572.7	575.1	573.3	573.4	573.1	570.5	578.0	575.6
15	568.5	570.2	575.9	577.5	578.3	577.7	579.	578.0	567.3	569.3
16	567.4	567.	567.5	565.8	565.9	565.3	565.9	566.1	567.3	569.3
17	566.2	567.	567.5	565.8	565.9	565.3	565.9	566.1	567.3	569.3
18	567.4	570.5	570.4	567.9	565.	569.	572.6	572.	571.9	574.3
19	561.8	564.8	563.4	563.6	564.	562.4	564.5	563.6	560.4	561.8
20	569.6	570.	570.4	570.6	571.9	572.6	572.4	572.7	572.8	574.7
21	569.1	569.5	569.5	570.8	571.	571.6	569.8	570.	569.	568.
22	573.4	572.7	573.5	573.4	574.6	574.3	574.5	574.1	574.6	576.
23	572.5	573.2	573.1	572.	574.9	573.9	575.1	572.8	574.6	573.5
24	572.	572.6	573.8	572.6	572.3	573.7	573.3	574.5	573.6	573.4
25	568.6	568.2	568.7	568.9	569.	569.	568.3	569.3	569.1	570.1
26	564.2	564.6	567.6	569.5	669.6	571.1	571.4	568.6	568.6	571.3
27	563.9	566.3	567.	566.6	566.5	567.6	567.6	567.1	567.2	569.2
28	563.6	563.5	563.9	564.8	564.5	560.4	561.	561.2	560.7	560.1
29	565.9	565.9	566.1	566.4	568.	568.1	567.4	567.6	568.5	569.
30	568.9	569.2	569.8	570.3	570.1	570.4	570.4	570.2	570.5	571.3
Means	568.9	569.2	569.8	570.3	570.1	570.4	570.4	570.2	570.5	571.3

MARCH.]

MAXIMUM OF VERTICAL FORCE.

[1842.]

Setting time Observatory time	h. m. 22 04 16 28½	Therm., Fah.	h. m. 22 10 16 29½	h. m. 22 16 16 35½	h. m. 22 22 16 41½	h. m. 22 28 16 47½	h. m. 22 34 16 53½	Therm., Fah.	h. m. 22 40 16 59½	h. m. 22 46 17 05½	h. m. 22 52 17 11½	h. m. 22 58 17 17½
Mar. 1	743.6	72.5	744.1	744.3	744.3	743.8	743.	71.5	742.2	741.1	740.	739.6
2	734.2	72.2	734.3	734.7	734.7	735.1	735.7	72.2	736.	736.3	736.7	737.5
3	779.	75.1	779.3	779.5	779.5	780.3	781.	75.8	782.2	782.	782.2	782.5
4	783.1	76.3	783.9	784.	784.1	785.	785.2	76.5	785.6	785.6	787.5	788.
5	691.7	69.9	691.8	691.	690.9	690.	689.	69.6	689.	688.8	688.7	689.
6	658.8	66.6	658.9	658.2	658.6	659.	658.5	66.3	659.	658.1	657.1	657.7
7	644.6	66.	644.6	645.4	646.4	646.4	646.5	66.	647.	647.5	647.7	647.9
8	617.5	64.6	619.	620.3	621.6	623.4	625.	64.9	626.2	628.	629.9	631.1
9	748.9	72.	748.2	748.9	748.7	748.7	748.8	71.9	748.7	748.3	748.1	748.
10	705.	68.	704.1	703.	701.5	700.8	698.2	66.9	697.5	695.7	692.7	690.8
11	612.3	64.1	611.5	611.1	611.1	611.	611.4	64.8	611.7	612.7	613.9	615.
12	686.	69.1	688.	689.5	690.9	692.	693.	68.9	694.5	695.5	696.5	697.1
13	676.5	70.	677.1	676.7	676.2	676.8	678.8	67.3	678.	677.5	677.6	676.
14	667.6	66.8	663.5	660.4	660.5	661.6	661.	66.1	658.1	656.5	655.7	656.2
15	663.5	66.6	663.8	664.	664.1	665.	665.7	67.2	666.	666.6	667.2	668.7
16	757.6	73.1	757.2	756.2	756.4	756.1	756.2	73.4	756.5	757.2	757.	757.5
17	711.	71.6	711.	711.8	711.8	712.	712.4	71.8	713.3	713.9	714.	714.7
18	632.5	63.6	631.8	631.	630.1	630.	629.6	63.3	629.8	630.	629.5	629.6
19	623.7	63.7	623.4	623.1	623.1	628.	623.	64.1	623.4	623.7	624.6	624.7
20	662.6	67.1	663.1	664.	664.	664.5	664.5	66.9	664.2	663.5	663.7	664.
21	675.2	67.3	676.	676.2	676.2	676.6	677.6	66.8	677.2	677.6	677.8	677.5
22	682.	64.3	682.1	682.2	682.8	683.2	683.5	64.8	684.	684.	684.1	684.5
23	661.4	66.	661.2	661.1	660.5	660.2	660.	65.	658.5	658.6	657.6	657.
24	672.	67.3	671.2	671.3	670.7	671.	670.8	67.	670.5	670.2	669.4	668.5
25	745.6	71.2	744.3	744.	744.	743.8	743.4	70.5	740.6	740.3	738.5	738.1
26	759.2	75.	760.5	761.	762.	763.2	764.5	76.	765.	766.	767.1	767.7
27	596.5	63.	596.9	597.1	597.7	598.2	596.5	64.	601.1	601.9	603.	604.5
Means	686.7	68.6	686.7	686.6	686.8	687.	687.	68.5	687.3	687.3	687.3	687.5
Reduced to 32° Fah.	192.2		192.7	193.	193.7	194.3	194.8		196.4	196.7	196.	196.5

[1849.

MAXIMUM OF VERTICAL FORCE—Continued.

MARCH.]

Göttingen time. Observatory time	<i>h. m.</i> 23 04 17 23½	Therm., Fah.	<i>h. m.</i> 23 10 17 29½	<i>h. m.</i> 23 16 17 35½	<i>h. m.</i> 23 22 17 41½	<i>h. m.</i> 23 28 17 47½	<i>h. m.</i> 23 34 17 53½	Therm., Fah.	<i>h. m.</i> 23 40 17 59½	<i>h. m.</i> 23 46 18 05½	<i>h. m.</i> 23 52 18 11½	<i>h. m.</i> 23 58 18 17½	Therm., Fah.
Mar. 1	738.	70.7	737.1	736.7	735.	735.	734.8	70.8	732.8	731.7	730.9	730.	70.
2	737.6	72.2	737.3	736.8	735.1	735.6	735.5	72.2	739.1	739.6	740.	740.9	72.3
3	737.	76.1	734.	734.	735.5	735.5	736.	76.2	736.	736.4	737.2	738.5	76.3
4	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
5	739.	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
6	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
7	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
8	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
9	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
10	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
11	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
12	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
13	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
14	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
15	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
16	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
17	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
18	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
19	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
20	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
21	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
22	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
23	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
24	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
25	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
26	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
27	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
28	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
29	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
30	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
31	738.7	76.9	739.7	739.	739.2	739.1	739.1	76.9	732.	732.	733.2	733.7	76.8
Means	687.4	68.3	686.1	686.4	688.3	688.3	688.4	68.2	685.3	686.3	688.2	688.2	68.
Reduced to 32° Fah.	196.8		196.	198.7	199.	199.5	200.		200.5	201.1	201.6	202.2	

[1842.]

MINIMUM OF VERTICAL FORCE.

[MARCH.]

Gettogen time. Observatory time.	A. m. 12 34 6 59.4	Therm. Fah.	A. m. 12 40 6 59.4	A. m. 12 46 7 05.4	A. m. 12 52 7 11.4	A. m. 12 58 7 17.4	A. m. 1 04 7 23.4	Therm. Fah.	A. m. 1 10 7 29.4	A. m. 1 16 7 35.4	A. m. 1 22 7 41.4	A. m. 1 28 7 47.4
Mar. 1	668	66.8	668	668.8	668.6	668.5	671.7	66.8	672.1	672	672.1	675.2
2	751	72.1	751.5	751.8	750.7	751.9	752.2	72.2	751.5	753	751.7	751.4
3	750.7	74.3	748.3	750.4	753.3	752.5	752.7	74.3	753.5	753	755.5	756.3
4	767.3	73.2	768.2	769	769.3	768.7	768.2	73.3	768.5	768.2	768.3	767.2
5	705.3	68.1	705.2	706.5	705.9	706.8	706.2	68.2	705.3	701.9	701.6	700.6
6	649	66.1	648.7	647.6	648.6	649.5	650.3	66.1	650.7	653.1	652.8	651.7
7	598.3	63.5	598.6	598.2	597.7	599.3	601.8	63.5	602.2	604.4	606	606
8	673.7	63.9	673.3	669.7	666.9	664.2	661.7	62.9	657.7	653.5	649.6	649.2
9	697.9	69.3	697.6	698.8	698.6	698.3	699.2	69.3	699.4	699.5	700.6	700.1
10	805.4	60.4	805.2	800.6	599.8	597.5	595.2	60	593	591	589.1	587.2
11	626.8	62.5	625.9	624.7	623.7	624.8	624.3	62.5	622.7	623	622	622.2
12	611.5	63.3	612.1	611.4	611.6	616	617.5	63.3	617.1	620.7	620	620.8
13	653.3	64.3	651.6	653.2	653.2	651.4	651.7	64.3	652.1	647	651	650.1
14	633.9	63.4	634.8	634.4	634.5	634.7	635.2	63.5	635	634.4	634.8	634.7
15	609.9	61	609.9	607.9	608.5	607.5	607.9	61	607.5	603.1	603.2	601.3
16	757.7	73.2	758	758.6	758.9	758.8	759.8	73.5	760.1	759.7	760.1	760.1
17	696	67.8	695.7	695.5	695.6	695	695.1	67.4	698.5	693.5	692.2	692.6
18	652.8	65.3	654.2	654	651.9	652.3	651.5	65.3	651.3	652.4	651.9	652.2
19	640.4	65	640.9	640.8	640.7	641	641	64.8	640.8	640.7	640.9	640.4
20	588.3	58.5	585.3	582	581.7	578.4	574.1	58	573.4	567.6	564.9	565.4
21	661.5	66.3	661	660.8	660	660.1	660	66	659.3	660.5	659.6	659.7
22	634.4	64	635.4	635.3	634.6	634.4	635	64	635	635	634.6	635
23	653.5	63.8	653.7	651.4	651.4	649.5	646.2	63.2	645	644.9	643.9	644
24	669.6	66.2	669.7	667.6	670.2	670.3	670.1	66.2	670.3	670	669.1	668.1
25	601.8	62.6	602.8	602.8	603.5	604.1	605.2	62.6	605.2	606.2	606.2	604.9
26	702	69.9	704.6	705.1	705	706	706	70	706.1	706.8	706.6	706.6
27	726.2	70.1	725.2	724.3	724.3	724.1	724	70.6	723.6	724.3	725.1	725.4
28	668.1	66.1	666.1	665.6	665.5	665.3	665.3	66.1	664.8	664.4	664.2	664
29	206.2		206.2	205.6	205.4	205.2	205.1		204.8	204.7	204.7	204.8
30												
31												
Means:	668.1	66.1	666.1	665.6	665.5	665.3	665.3	66.1	664.8	664.4	664.2	664
Reduced to 32° Fah.	206.2		206.2	205.6	205.4	205.2	205.1		204.8	204.7	204.7	204.8

* Supplied.

[1942.]

MINIMUM OF VERTICAL FORCE—Continued.

March.]

Göttingen time Observatory time	<i>h. m.</i> 13 34 7 53½	Therm., Fah.	<i>h. m.</i> 13 40 7 59½	<i>h. m.</i> 13 46 8 05½	<i>h. m.</i> 13 52 8 11½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 14 04 8 23½	Therm., Fah.	<i>h. m.</i> 14 10 8 29½	<i>h. m.</i> 14 16 8 35½	<i>h. m.</i> 14 22 8 41½	<i>h. m.</i> 14 28 8 47½	Therm., Fah.
Mon. 1	678.	67.8	677.9	691.7	683.7	685.2	687.	69.5	688.5	692.3	698.	695.	69.6
2	752.	72.2	751.7	752.	751.7	751.8	751.5	72.	752.4	752.5	751.6	751.5	71.9
3	759.5	73.8	761.5	764.8	765.2	767.	768.2	74.2	769.1	770.2	771.1	771.4	74.3
4	768.5	74.4	768.	768.1	768.	768.3	768.4	73.7	769.3	769.5	769.4	770.	74.
5	790.4	68.2	700.4	700.7	698.5	696.9	698.	68.2	695.	693.5	693.4	692.8	68.4
6	652.7	66.	652.2	652.6	652.9	653.	652.9	66.	652.6	652.6	652.7	652.6	66.
7	606.8	63.8	607.2	609.	610.	611.	612.7	64.2	614.8	615.7	617.1	618.1	64.5
8	644.2	62.8	641.3	618.7	633.9	630.6	628.7	62.5	625.	622.5	621.7	620.2	62.3
9	700.6	59.3	700.9	701.8	701.9	703.2	703.2	59.3	702.4	703.9	708.5	703.8	59.9
10	585.1	59.7	583.7	581.7	579.5	578.4	576.6	59.3	575.	573.5	572.5	571.6	58.7
11	681.9	62.3	620.3	620.7	617.9	616.2	615.	62.	613.	611.8	610.1	609.3	62.
12	650.1	64.2	646.9	649.8	618.6	649.7	648.	64.	617.5	646.6	647.3	646.	63.8
13	634.9	63.6	636.	635.4	635.2	635.4	635.6	63.7	636.1	636.	636.5	637.5	64.4
14	600.2	61.2	600.1	600.1	598.7	597.9	598.	61.4	598.	598.7	598.9	599.5	62.2
15	760.	72.2	760.	759.7	759.5	758.5	758.4	72.	757.8	757.4	757.	756.5	72.
16	692.5	67.	691.9	691.9	692.5	691.4	690.9	66.8	690.4	690.1	689.5	689.3	66.8
17	651.3	65.1	651.	653.4	652.8	651.9	651.7	65.	652.2	651.2	651.1	651.2	64.7
18	638.8	64.6	639.4	638.	637.8	637.	637.	64.4	638.2	636.4	636.5	635.5	64.2
19	584.4	58.2	584.9	581.9	558.6	558.6	558.6	59.4	560.1	562.1	561.6	565.1	58.6
20	658.	65.	658.	657.5	657.7	655.2	655.2	64.5	654.4	653.2	653.	652.5	64.
21	685.	63.1	634.5	632.7	630.8	629.7	628.3	62.2	626.9	627.1	623.2	623.6	61.5
22	644.1	64.3	644.3	638.7	639.5	638.6	638.5	61.5	638.8	640.	640.	641.1	65.7
23	668.5	66.2	666.5	666.	663.9	664.6	660.7	65.	659.6	658.3	657.	655.	64.3
24	608.	63.7	608.7	610.2	611.4	613.3	613.5	64.2	615.3	617.2	619.2	621.3	65.1
25	706.7	69.3	708.7	708.	707.6	707.7	707.2	68.8	708.4	707.5	707.4	705.9	68.4
26	726.	71.6	727.	728.3	729.6	731.1	732.6	72.8	733.4	734.5	735.8	737.2	72.8
Means	664.	66.	663.8	663.9	663.3	663.2	662.9	66.	662.8	662.8	662.8	662.8	66.
Reduced to 32° Fah.	205.		205.	205.2	204.8	204.8	204.7		204.3	204.	203.7	203.4	

March.]

FIRST MAXIMUM OF HORIZONTAL FORCE.

[1842.

Göttingen time Observatory time	h. m. 11 32 5 51½	Therm., Fah.	h. m. 11 38 5 57½	h. m. 11 44 6 03½	h. m. 11 50 6 09½	h. m. 11 56 6 15½	h. m. 12 02 6 21½	Therm., Fah.	h. m. 12 08 6 27½	h. m. 12 14 6 33½	h. m. 12 20 6 39½	h. m. 12 26 6 45½	Therm., Fah.
Mar. 1	569.4	63.5	568.4	567.0	566.4	567.	564.5	63.6	566.9	567.4	566.2	566.9	63.7
2	592.1	70.	589.9	589.3	588.	588.8	590.4	70.	589.2	589.3	588.6	588.5	70.3
3	590.8	70.7	580.5	581.	582.	582.5	583.8	70.7	579.3	577.9	580.	580.7	70.7
4	592.6	71.3	595.2	595.8	595.5	596.7	596.8	71.3	596.5	596.8	596.	596.1	71.3
5	611.3	68.1	611.	611.0	612.6	612.2	612.5	68.2	611.2	611.3	612.3	612.3	68.3
6	566.4	63.5	567.7	568.1	568.	567.6	565.9	63.6	566.8	567.2	566.5	566.5	63.8
7	529.8	58.4	530.8	532.	529.6	528.3	527.	58.5	530.1	532.4	532.3	532.1	58.5
8	552.	63.	552.9	552.2	553.	552.5	553.6	63.	555.8	554.	554.9	556.1	63.2
9	568.6	68.8	570.8	571.1	571.8	571.6	574.	68.8	573.8	571.5	574.1	574.1	68.8
10	.....	59.8	.....	564.5	564.5	565.2	565.2	59.8	563.9	564.7	565.	565.8	59.8
11	520.3	58.8	516.7	518.3	521.6	522.3	522.2	59.	522.2	523.7	523.1	523.	59.
12	535.9	59.8	535.3	537.4	536.3	534.7	535.2	59.8	536.4	535.8	536.2	536.5	60.
13	536.5	61.8	535.2	535.1	534.8	533.4	533.4	61.5	534.5	536.2	534.3	534.7	61.6
14	521.1	60.	522.4	521.1	522.7	521.	520.1	59.7	531.4	519.9	520.2	519.5	59.6
15	570.9	58.7	569.8	569.2	569.4	569.5	570.1	58.5	569.6	570.1	569.5	569.9	58.6
16	568.	70.5	568.7	568.1	567.8	567.8	567.5	70.5	563.9	566.	563.8	563.1	70.5
17	557.	65.7	560.9	561.	561.2	562.4	561.	65.9	559.8	568.9	559.8	560.	65.8
18	565.1	63.8	563.8	565.3	565.1	562.9	564.4	64.	565.1	562.1	561.3	562.	63.8
19	557.5	62.2	569.7	569.6	568.5	568.8	568.7	62.4	558.2	556.6	557.5	557.9	62.2
20	545.4	58.	546.4	544.9	544.7	545.5	544.3	57.5	544.3	542.9	547.5	548.5	57.
21	556.8	63.5	560.	558.3	558.7	558.2	558.3	63.5	557.9	557.9	556.8	556.6	63.5
22	565.7	61.5	565.2	566.2	567.1	566.2	566.9	61.7	567.4	568.	567.4	568.	61.8
23	574.8	62.	575.1	575.7	577.	577.6	577.4	62.	577.9	576.7	575.2	575.5	62.
24	564.	64.3	564.	563.8	565.6	565.1	562.3	64.5	560.8	557.3	560.	561.5	64.7
25	546.	58.4	544.	547.5	548.3	546.2	542.	58.7	537.5	536.6	536.6	537.	59.
26	571.5	66.8	572.	573.8	572.	572.	571.5	67.	571.3	570.9	569.7	569.2	67.1
27	576.4	67.4	577.7	576.6	576.4	576.4	575.6	67.4	575.6	575.3	573.4	571.4	67.4
Means	561.3	63.6	561.7	562.	562.2	561.9	561.6	63.7	561.4	560.9	561.	561.2	63.7
Reduced to 32° Fah.	475.7		476.1	476.6	476.8	476.4	476.1		475.9	475.4	475.5	475.6	

March.]

SECOND MAXIMUM OF HORIZONTAL FORCE.

[1842.

[97]

650

Göttingen time.....	h. m.	Therm., Fah.	h. m.	h. m.	h. m.	h. m.	h. m.	Therm., Fah.	h. m.	h. m.	h. m.	h. m.	h. m.
Observatory time.....	21 02 15 21½		21 08 15 27½	21 14 15 33½	21 20 15 39½	21 26 15 45½	21 32 15 51½		21 38 15 57½	21 44 16 03½	21 50 16 09½	21 56 16 16½	
Mar. 1.....	578.1	67.6	579.7	580.8	581.	584.	588.9	67.6	589.9	586.3	588.	593.4	
2.....	606.7	69.9	606.	604.4	602.1	599.2	598.7	70.1	600.7	602.2	601.7	601.4	
3.....	607.	73.8	609.	606.5	611.9	610.2	611.8	73.8	609.5	612.5	609.	610.5	
4.....	594.4	73.9	595.6	594.3	595.	595.7	598.3	74.1	598.3	599.4	599.	597.7	
5.....	604.2	69.	608.	608.	605.7	606.6	606.2	69.	602.7	605.8	611.5	614.3	
6.....	568.4	63.8	568.5	570.5	569.2	569.9	569.3	64.	569.6	570.7	568.2	568.2	
7.....	540.1	61.7	541.4	543.4	544.	543.3	545.6	61.8	545.	543.7	547.9	546.	
8.....	560.2	60.6	566.	557.1	556.2	553.4	553.9	61.1	555.4	554.4	554.2	550.2	
9.....	581.8	70.8	579.5	581.3	581.1	582.2	582.8	70.7	583.5	583.5	583.2	581.3	
10.....	569.	65.9	569.5	568.5	560.	569.9	569.	65.5	580.2	581.8	581.3	561.6	
11.....	591.6	68.7	519.4	518.3	520.	519.6	520.7	68.	520.6	520.	519.6	519.9	
12.....	538.7	65.	531.5	538.5	534.3	535.1	536.2	65.3	534.9	534.	538.6	537.	
13.....	561.9	63.	563.7	567.	564.7	566.6	562.9	62.8	568.3	560.1	560.6	563.5	
14.....	547.8	63.7	547.	546.9	550.5	551.5	561.9	63.7	567.4	568.5	568.3	570.	
15.....	570.4	64.3	570.2	570.	572.7	572.5	572.	64.8	570.5	570.2	570.	570.	
16.....	567.3	70.3	563.6	559.6	556.1	557.1	559.4	70.3	560.4	563.	563.5	564.	
17.....	606.3	69.	605.5	604.4	601.4	604.3	602.5	69.5	601.6	603.5	604.	607.	
18.....	562.7	61.1	566.6	561.3	564.6	563.6	561.4	60.9	560.9	560.7	562.5	566.3	
19.....	546.2	60.8	536.1	535.3	534.6	532.2	534.7	60.8	533.6	534.	534.8	535.2	
20.....	573.1	64.7	569.3	562.	552.6	554.	559.5	63.8	560.	556.6	552.2	566.	
21.....	609.3	61.6	608.9	592.8	585.7	585.7	582.5	61.6	581.5	567.2	563.4	569.	
22.....	560.	63.5	651.5	553.8	551.7	552.2	552.7	63.6	579.5	561.5	562.	576.5	
23.....	549.8	64.4	548.6	547.9	549.	549.	560.	64.2	553.7	556.	555.2	555.4	
24.....	568.8	69.	572.6	571.5	568.8	570.3	570.3	69.	546.	547.1	548.7	561.	
25.....	591.4	71.8	598.4	598.9	599.9	598.9	598.5	72.4	597.9	598.8	598.4	598.1	
26.....	572.	60.5	571.5	564.7	560.5	566.5	568.8	60.3	563.	560.	557.2	557.7	
27.....													
28.....													
29.....													
30.....													
31.....													
Means.....	573.4	65.6	570.1	568.7	568.6	568.5	569.4	65.7	569.6	570.1	570.1	571.1	
Reduced to 32° Fah.....	492.		479.3	477.8	477.7	477.5	478.4		478.5	478.	478.9	479.9	

[1842.]

SECOND MAXIMUM OF HORIZONTAL FORCE—Continued.

March.]

Getting time Observatory time	A. m. 22 09 16 31½	Therm. Fah.	A. m. 22 06 16 27½	A. m. 22 14 16 33½	A. m. 22 20 16 39½	A. m. 22 26 16 45½	A. m. 22 32 16 51½	Therm. Fah.	A. m. 22 38 16 57½	A. m. 22 44 17 03½	A. m. 22 50 17 09½	Therm. Fah.
Mar. 1	596.7	67.6	600.2	604.2	603.9	602.	600.7	67.6	600.6	597.3	601.2	608.5
2	602.9	70.3	601.5	604.4	605.2	604.6	605.1	70.3	606.7	606.2	606.7	70.3
3	606.4	74.	609.	608.4	609.6	610.3	612.3	74.1	606.3	606.6	606.4	74.3
4	599.7	74.4	602.6	604.6	603.	603.3	604.1	74.9	607.2	608.	612.6	75.4
5	624.5	69.	624.4	637.8	639.3	636.9	636.	68.8	634.7	633.4	634.	68.9
6	567.1	64.	567.8	566.1	568.3	568.3	567.6	64.	568.2	563.9	564.3	61.
7	546.4	62.	549.3	548.9	546.3	543.6	545.4	62.2	548.1	530.2	546.	62.4
8	546.4	61.8	547.9	547.5	548.8	550.	552.5	62.8	553.	538.7	554.5	63.6
9	563.8	70.8	565.5	563.7	565.5	564.2	566.6	70.8	568.5	567.7	569.	70.8
10	561.6	64.7	561.6	563.7	561.2	560.3	559.	63.9	558.2	558.6	567.3	63.2
11	520.3	59.1	520.5	520.7	519.6	521.7	521.1	59.5	521.3	522.9	519.7	59.8
12	534.3	66.	539.5	538.6	540.	538.8	537.8	66.2	539.2	540.5	536.5	66.4
13	565.6	62.9	568.	566.6	569.	563.6	563.5	62.8	561.5	558.7	556.	62.8
14	573.9	63.5	563.8	564.2	584.	582.5	584.5	63.1	587.4	590.2	592.1	62.8
15	571.4	65.1	570.6	570.5	572.	574.3	578.5	66.7	579.9	572.5	571.5	66.1
16	564.6	70.5	566.5	566.1	566.7	564.6	564.7	70.7	564.8	565.2	566.	70.9
17	608.	70.8	613.7	619.7	626.8	625.2	624.5	71.4	632.	635.	626.2	72.
18	570.2	60.8	569.5	566.2	563.5	562.	561.7	60.8	560.5	559.7	562.9	60.8
19	565.9	60.8	563.7	555.2	556.3	552.9	553.5	61.1	550.3	550.3	555.2	61.3
20	577.9	63.7	573.4	569.6	578.	578.2	583.1	63.8	569.9	561.2	563.6	63.9
21	570.2	64.8	567.2	563.8	568.1	570.1	571.2	64.8	571.9	571.8	577.4	64.8
22	575.8	61.7	575.	573.3	580.4	580.6	581.6	62.	567.3	579.1	573.9	62.2
23	557.	63.1	557.7	557.9	559.4	562.4	563.	63.2	561.4	560.	562.2	61.4
24	561.5	64.	565.3	559.8	560.2	563.7	565.	64.	566.4	563.2	562.5	64.
25	567.1	66.7	570.7	572.3	571.1	568.1	565.7	66.4	568.	567.2	570.7	68.1
26	599.1	72.8	599.3	599.	593.2	589.2	591.8	73.1	592.	591.7	595.5	73.4
27	567.5	60.3	557.	559.	567.5	563.	561.1	60.9	555.8	564.7	562.4	61.4
Means	572.5	65.8	573.7	574.	575.4	575.	575.5	65.9	575.1	574.4	574.6	66.
Reduced to 32° Fah.	481.2		483.4	482.6	484.	483.5	483.9		483.5	483.7	482.9	483.6

March.]

FIRST MINIMUM OF HORIZONTAL FORCE.

[1842.]

[97]

652

Setting time..... Observatory time.....	h. m. 1 02 19 21½	Therm., Fah.	h. m. 1 09 19 27½	h. m. 1 14 19 33½	h. m. 1 20 19 39½	h. m. 1 26 19 45½	h. m. 1 32 19 51½	Therm., Fah.	h. m. 1 38 19 57½	h. m. 1 44 20 03½	h. m. 1 50 20 09½	h. m. 1 56 20 15½
Mar. 1.....	591.5	68.5	591.	590.	590.3	591.1	586.4	68.3	586.6	587.3	587.1	587.7
2.....	600.	70.2	599.7	598.4	595.3	597.	596.7	70.2	595.7	597.1	597.6	596.4
3.....	606.7	75.	608.7	607.1	607.3	613.5	613.3	75.	607.5	607.5	607.3	603.7
4.....	617.9	75.	617.9	617.8	617.6	621.3	622.6	74.8	621.1	617.7	618.1	615.
5.....	596.8	68.6	599.1	599.2	596.5	590.6	589.1	66.4	600.4	611.6	616.2	616.8
6.....	557.	63.7	557.1	566.	561.8	562.8	562.4	63.	562.	561.	559.	558.5
7.....	566.5	61.1	566.2	566.	565.7	566.4	565.2	61.	565.2	563.2	563.5	561.7
8.....	565.5	61.9	563.3	563.3	561.7	563.5	566.9	61.8	564.3	564.7	564.7	564.8
9.....	.....	69.	590.4	591.7	586.9	588.5	590.9	68.7	591.	590.	590.	590.8
10.....	556.5	60.4	553.6	553.2	555.6	557.	557	60.6	555.7	554.7	553.7	553.
11.....	529.4	61.1	530.3	529.2	529.5	533.	533.5	61.2	533.5	530.4	533.9	532.4
12.....	547.1	69.5	546.8	546.8	544.9	543.6	546.2	69.2	547.1	546.	545.7	546.7
13.....	565.4	61.8	562.4	559.5	559.1	557.7	558.3	61.5	561.2	560.2	560.8	562.
14.....	577.2	62.	579.	579.5	588.3	593.9	596.5	61.5	591.6	593.	598.8	604.3
15.....	584.5	63.	582.	582.7	580.	575.6	576.8	68.7	572.8	569.5	567.6	576.2
16.....	574.9	69.7	575.7	576.6	576.4	577.5	577.5	69.5	577.4	577.3	578.	575.9
17.....	646.4	71.3	647.2	648.3	648.3	652.5	655.3	71.2	655.	650.7	647.5	645.7
18.....	566.9	59.	557.1	557.1	557.8	559.	560.4	59.	557.4	557.	556.5	556.4
19.....	563.5	61.3	561.7	563.3	560.6	561.5	563.2	61.3	567.	566.2	568.4	568.5
20.....	598.	61.6	584.5	588.	599.4	608.2	610.7	61.	606.8	605.5	607.1	603.
21.....	577.8	61.	567.7	560.4	568.9	566.5	568.4	60.8	568.	572.7	576.3	576.7
22.....	582.8	62.	580.5	575.5	576.3	574.5	572.	61.8	569.6	570.1	572.8	573.9
23.....	576.4	58.8	577.	577.	579.6	577.8	574.5	58.	575.5	575.2	572.8	573.8
24.....	558.1	60.8	557.9	558.7	559.1	558.7	559.1	60.4	568.1	557.1	556.1	559.4
25.....	587.	65.8	586.5	585.2	584.6	586.7	588.7	65.4	588.1	587.4	593.3	579.3
26.....	612.9	73.2	614.3	617.7	615.6	615.4	614.1	73.2	611.2	609.	605.3	608.
27.....	553.7	63.	554.9	555.5	554.6	554.5	556.6	63.	556.4	554.9	554.7	554.4
Means.....	578.8	65.2	578.3	578.1	578.	579.6	580.	65.1	579.5	579.2	579.5	579.4
Reduced to 32° Fah....	489.4		488.7	488.6	488.6	490.3	490.8		490.4	490.3	490.7	490.8

MARCH.]

FIRST MINIMUM OF HORIZONTAL FORCE—Continued.

[1842.

Göttingen time.....	h. m. 2 02 20 21½	Therm., Fah. 20 27½	h. m. 2 08 20 27½	h. m. 2 14 20 33½	h. m. 2 20 20 39½	h. m. 2 26 20 45½	h. m. 2 32 20 51½	Therm., Fah. 20 57½	h. m. 2 38 20 57½	h. m. 2 44 21 03½	h. m. 2 50 21 09½	h. m. 2 56 21 15½	Therm., Fah. 21 15½
Mar. 1	591.	68.	588.6	588.8	588.	590.2	591.	67.8	590.	589.5	588.7	590.5	67.7
2	598.2	70.1	597.5	597.5	596.4	594.	596.6	70.1	598.5	599.	598.9	597.8	70.
3	606.7	75.	604.6	603.9	603.2	604.	605.1	75.	606.1	606.6	606.6	609.1	75.
4	611.	74.3	609.5	611.8	612.8	613.1	611.3	74.2	609.7	608.2	606.9	605.4	74.
5	618.6	66.	619.3	620.3	621.5	622.7	621.5	62.5	622.3	616.2	616.5	620.9	65.
6	625.7	62.8	621.7	624.2	625.7	626.7	624.6	62.	627.2	617.7	617.7	621.2	61.7
7	632.2	60.5	628.5	630.5	631.5	632.7	630.5	60.	632.2	622.2	622.2	625.2	59.6
8	638.2	61.9	634.5	636.5	637.5	638.7	636.5	61.9	638.2	632.2	632.2	635.2	59.6
9	644.2	68.4	640.5	642.5	643.5	644.7	642.5	68.1	643.2	637.2	637.2	640.2	62.
10	650.2	60.1	646.7	648.7	649.7	650.9	648.7	60.1	649.2	643.2	643.2	646.2	68.
11	656.2	60.5	652.7	654.7	655.7	656.9	654.7	60.5	655.2	649.2	649.2	652.2	59.7
12	662.2	61.3	658.7	660.7	661.7	662.9	660.7	61.3	661.2	655.2	655.2	658.2	59.6
13	668.2	69.4	664.7	666.7	667.7	668.9	666.7	69.4	667.2	661.2	661.2	664.2	59.6
14	674.2	61.3	670.7	672.7	673.7	674.9	672.7	61.3	673.2	667.2	667.2	670.2	59.6
15	680.2	69.1	676.7	678.7	679.7	680.9	678.7	69.1	680.2	674.2	674.2	677.2	59.6
16	686.2	69.2	682.7	684.7	685.7	686.9	684.7	69.2	686.2	680.2	680.2	683.2	59.6
17	692.2	71.1	688.7	690.7	691.7	692.9	690.7	71.1	691.2	685.2	685.2	688.2	59.6
18	698.2	61.	694.7	696.7	697.7	698.9	696.7	61.	698.2	692.2	692.2	695.2	59.6
19	704.2	60.3	700.7	702.7	703.7	704.9	702.7	60.3	703.2	697.2	697.2	700.2	59.6
20	710.2	60.3	706.7	708.7	709.7	710.9	708.7	60.3	710.2	704.2	704.2	707.2	59.6
21	716.2	61.6	712.7	714.7	715.7	716.9	714.7	61.6	716.2	710.2	710.2	713.2	59.6
22	722.2	67.5	718.7	720.7	721.7	722.9	720.7	67.5	722.2	716.2	716.2	719.2	59.6
23	728.2	64.3	724.7	726.7	727.7	728.9	726.7	64.3	728.2	722.2	722.2	725.2	59.6
24	734.2	73.2	730.7	732.7	733.7	734.9	732.7	73.2	734.2	728.2	728.2	731.2	59.6
25	740.2	62.7	736.7	738.7	739.7	740.9	738.7	62.7	740.2	734.2	734.2	737.2	59.6
26	746.2	64.7	742.7	744.7	745.7	746.9	744.7	64.7	746.2	740.2	740.2	743.2	59.6
27	752.2	64.7	748.7	750.7	751.7	752.9	750.7	64.7	752.2	746.2	746.2	749.2	59.6
28	758.2	64.7	754.7	756.7	757.7	758.9	756.7	64.7	758.2	752.2	752.2	755.2	59.6
29	764.2	64.7	760.7	762.7	763.7	764.9	762.7	64.7	764.2	758.2	758.2	761.2	59.6
30	770.2	64.7	766.7	768.7	769.7	770.9	768.7	64.7	770.2	764.2	764.2	767.2	59.6
31	776.2	64.7	772.7	774.7	775.7	776.9	774.7	64.7	776.2	770.2	770.2	773.2	59.6
Means.....	782.8	64.7	778.4	780.4	781.4	782.6	780.4	64.5	782.2	776.2	776.2	779.2	64.3
Reduced to 32° Fah.....	490.4		490.1	490.4	490.8	490.7	490.5		490.2	489.2	489.2	489.5	

[1842.]

SECOND MINIMUM OF HORIZONTAL FORCE.

March.]

Getting time. Observatory time.	A. m. 15 32 9 51½	Therm. Fah.	h. m. 15 38 9 57½	h. m. 15 44 10 03½	h. m. 15 50 10 09½	h. m. 15 56 10 15½	h. m. 16 02 10 21½	Therm. Fah.	h. m. 16 08 10 27½	h. m. 16 14 10 33½	h. m. 16 20 10 39½	h. m. 16 26 10 45½
Mar. 1												
2	587	69.3	587.3	588.7	588.2	588.7	589.9	68.8	591.7	589.8	592.8	595.2
3	602.6	71.6	603	601.2	600.6	600.6	599	71.4	600.3	599	599.2	599.2
4	592.9	72.4	594.7	594.7	594.5	594.5	595	72.4	597.1	595.3	596.7	597.2
5	600.7	68.1	603.1	605.2	607.3	607.3	609.5	67.8	608.7	609.4	609.6	612.8
7	578.5	63.0	578.8	579.1	581	581	580.4	63.6	583.4	581.9	583.5	584.5
8	543	61.4	547.1	547	546.6	546.6	545.9	61.2	551.3	543.6	543	556.5
9	563.9	60.4	563.2	564.5	565.4	565.4	566.2	60.3	569.4	572	576.2	580.2
10	591.2	68.8	592.1	592.7	593.5	594	594.4	68.4	596.7	597.1	598	598.4
11	571.6	56	572	570.6	571.2	570.2	571	55.2	571.7	570.2	569.5	567.4
12	538.5	55.4	536.2	539.7	538.9	540.5	543.5	54.6	544.4	546.3	546.6	544.9
14	550	60	549.6	550	552.4	552.6	552.3	60.4	553.7	554.8	556	557.8
15	557.6	61.4	560.1	559.2	558.8	558.4	559.3	61.4	559.7	560.9	560.9	562.3
16	527.7	61.7	529.9	537.4	542	542	544.7	61.9	546.8	553.2	540.5	543.1
17	577	61.3	579.3	579.5	580.8	582	582.9	61.0	583.3	583.2	582.2	584.5
18	584.7	60.1	584.4	588	588.4	588.1	589.9	60.3	591.6	590.2	589.6	591.7
19	578.3	65.1	582.9	584.6	588.5	588.5	592.4	65.5	595.3	595.5	598	598.8
21	578	61.3	580.1	578	577.7	578	576.3	61	576.2	577.8	577.2	576.3
22	575.5	61.8	578.1	578.3	580	581.2	584.7	62.1	585.1	584	586.6	588.3
23	561.9	59.7	562.1	561.1	562.3	562.9	561.7	60.1	564.4	566	563.4	565.7
24	579.1	61.2	580.5	581	581.2	584.3	583.4	61.7	582.1	587.1	583	585
25	632.9	58	632.3	632.3	631.9	627.1	627.1	58	625.1	619.7	617.2	614.8
26	595.5	63.4	596	596	595	595.5	594.6	63.4	600.2	598.9	599.1	599.4
28	591	60.5	591	591	592.5	593.6	594.8	60.7	596	598	601.7	607.5
29	571.8	62.7	573.4	574.4	577.1	581.1	582.9	63.4	586.4	585.7	583.8	582.3
30	591.3	65.8	591.3	592	594.3	594.3	594.3	66.3	596.9	601.5	601.5	602.3
31	592.4	68.8	594.2	595	594.7	594.3	595.8	68	598	599.5	599.3	601.1
Means	577.3	63.4	578.6	579.1	580	580.8	581.4	63.5	582.9	583.1	582.9	584.5
Reduced to 32° Fah.	492.5		493.8	494.3	495.1	495.9	496.5		498	498.1	497.9	499.4

MARCH.]

SECOND MINIMUM OF HORIZONTAL FORCE—Continued.

[1842.]

Göttingen time. Observatory time.		h. m. 16 32 10 51½		h. m. 16 38 10 57½		h. m. 16 44 11 03½		h. m. 16 50 11 09½		h. m. 16 56 11 15½		h. m. 17 02 11 21½		Therm., Fah.		h. m. 17 08 11 27½		h. m. 17 14 11 33½		h. m. 17 20 11 39½		h. m. 17 26 11 45½		Therm., Fah.	
Mar. 1		595.8		596.5		597.5		595		595.3		596		68.7		595.5		395		601.5		601.7		68.7	
2		600.5		601.1		599.2		600.3		599.3		603.4		71.2		600.5		603		604.2		601.7		71.2	
3		597.5		596.5		599.5		601.7		601		603.4		72.5		602.5		604.3		604.2		604.5		72.5	
4		614.2		613.5		613		613.5		613		615.1		67.9		612.2		611.3		613.7		613.2		68	
5		584.8		586.3		586.2		585.2		585.3		587.2		63.9		587.9		590.1		592.4		591.5		64	
6		652.6		607.7		582.7		551.8		562.4		549.3		60.3		547.1		548.5		548.6		547.7		60	
7		580.6		598.6		583.6		586.6		588.7		586.5		59.4		595.6		585.2		584.7		592.1		59	
8		597.4		598.3		598		598.5		597.2		599.3		68.9		598.6		597		593.9		595.2		59	
9		586.6		587.1		584.1		565		564.1		564		58.5		564		562.3		563.9		563.5		59.8	
10		543.9		544.4		544.8		545.6		544.3		543.5		53		543		541.1		538.6		537.6		52.6	
11		559		559.7		561.5		563.5		564.8		565.2		61		554.9		565.1		566		565.4		61.3	
12		581.4		581.1		582.6		583.3		581		582		62.9		557.2		563.9		561		563.8		62.5	
13		541.8		545.2		546.4		549.2		550.7		550.7		62.3		551		549.8		550.1		550.1		62.4	
14		585		585.9		586.4		586.2		585.7		585.8		62.5		585.9		587.3		589.3		589.1		62.7	
15		592.3		591.4		589.5		590.1		590.1		592.1		69.6		590		590.2		587.1		587.6		69.7	
16		586.8		587		588.7		588.7		586.1		588.5		65.9		589.7		589.6		611.3		612		66.1	
17		575.7		574.4		574.3		574		571.1		569.4		61.2		568.5		567.9		567.5		569.1		61.5	
18		589.8		589.8		589.9		585.5		584.8		584.1		62.4		584.1		584.4		584.7		582.4		62.5	
19		561.3		562.5		563.9		563.9		562.5		568		61.7		569		567		562.1		562.3		62.3	
20		584.2		585.2		586.5		587.1		585		600.1		62.7		589		590.9		592.7		592.3		63.2	
21		612.9		611.6		608		611.3		616		613.4		58.6		609		608.5		606.6		607.5		58	
22		597.5		599.4		599.8		599.1		599.1		598.3		60.8		596.6		599.3		598.8		598.2		60.8	
23		607.6		609.6		606.9		607.5		602.3		598.3		60.8		596		592.6		593.7		582.7		66.4	
24		584.3		586.9		587.7		584.9		583.6		583.2		65.1		583.6		583.7		579.8		582.7		66.4	
25		603.1		604.6		606.4		607.5		607.4		607.6		66.2		606.5		610.2		609.9		610.8		67	
26		600		601.3		600.1		599.5		598.5		600.5		66.2		599.6		599		598.6		597.5		65.6	
Means		584.1		584.9		585.7		585.7		585.7		586.9		63.7		584.5		584.9		584		583.8		63.9	
Reduced to 32° Fah.		498.9		499.6		499.7		500.3		500.2		500.3		498.8		498.5		499		498.5		498.2			

FIRST MAXIMUM OF DECLINATION.

ARIZ.]

[1842.

	<i>h.</i>	<i>m.</i>	<i>h.</i>	<i>m.</i>	<i>h.</i>	<i>m.</i>	<i>h.</i>	<i>m.</i>	<i>h.</i>	<i>m.</i>	<i>h.</i>	<i>m.</i>	<i>h.</i>	<i>m.</i>	<i>h.</i>	<i>m.</i>	<i>h.</i>	<i>m.</i>
Göttingen time.....	6 00	0 19 $\frac{1}{2}$	6 06	0 25 $\frac{1}{2}$	6 12	0 31 $\frac{1}{2}$	6 18	0 37 $\frac{1}{2}$	6 24	0 43 $\frac{1}{2}$	6 30	0 49 $\frac{1}{2}$	6 36	0 55 $\frac{1}{2}$	6 42	1 01 $\frac{1}{2}$	6 48	1 07 $\frac{1}{2}$
Observatory time.....	0 19 $\frac{1}{2}$	0 25 $\frac{1}{2}$	0 31 $\frac{1}{2}$	0 37 $\frac{1}{2}$	0 43 $\frac{1}{2}$	0 49 $\frac{1}{2}$	0 55 $\frac{1}{2}$	1 01 $\frac{1}{2}$	1 07 $\frac{1}{2}$	1 13 $\frac{1}{2}$	1 19 $\frac{1}{2}$	1 25 $\frac{1}{2}$	1 31 $\frac{1}{2}$	1 37 $\frac{1}{2}$	1 43 $\frac{1}{2}$	1 49 $\frac{1}{2}$	1 55 $\frac{1}{2}$	2 01 $\frac{1}{2}$
April 1.....	558.3	558.5	558.8	559.2	559.5	559.8	560.1	560.4	560.7	561.0	561.3	561.6	561.9	562.2	562.5	562.8	563.1	563.4
2.....	562.1	562.4	562.7	563.0	563.3	563.6	563.9	564.2	564.5	564.8	565.1	565.4	565.7	566.0	566.3	566.6	566.9	567.2
4.....	568.5	568.8	569.1	569.4	569.7	570.0	570.3	570.6	570.9	571.2	571.5	571.8	572.1	572.4	572.7	573.0	573.3	573.6
5.....	562.1	562.4	562.7	563.0	563.3	563.6	563.9	564.2	564.5	564.8	565.1	565.4	565.7	566.0	566.3	566.6	566.9	567.2
6.....	567.9	568.2	568.5	568.8	569.1	569.4	569.7	570.0	570.3	570.6	570.9	571.2	571.5	571.8	572.1	572.4	572.7	573.0
7.....	560.	560.3	560.6	560.9	561.2	561.5	561.8	562.1	562.4	562.7	563.0	563.3	563.6	563.9	564.2	564.5	564.8	565.1
8.....	565.	565.3	565.6	565.9	566.2	566.5	566.8	567.1	567.4	567.7	568.0	568.3	568.6	568.9	569.2	569.5	569.8	570.1
9.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11.....	573.	573.3	573.6	573.9	574.2	574.5	574.8	575.1	575.4	575.7	576.0	576.3	576.6	576.9	577.2	577.5	577.8	578.1
12.....	574.3	574.6	574.9	575.2	575.5	575.8	576.1	576.4	576.7	577.0	577.3	577.6	577.9	578.2	578.5	578.8	579.1	579.4
13.....	559.2	559.5	559.8	560.1	560.4	560.7	561.0	561.3	561.6	561.9	562.2	562.5	562.8	563.1	563.4	563.7	564.0	564.3
14.....	561.7	562.0	562.3	562.6	562.9	563.2	563.5	563.8	564.1	564.4	564.7	565.0	565.3	565.6	565.9	566.2	566.5	566.8
15.....	524.5	524.8	525.1	525.4	525.7	526.0	526.3	526.6	526.9	527.2	527.5	527.8	528.1	528.4	528.7	529.0	529.3	529.6
16.....	575.6	575.9	576.2	576.5	576.8	577.1	577.4	577.7	578.0	578.3	578.6	578.9	579.2	579.5	579.8	580.1	580.4	580.7
17.....	564.	564.3	564.6	564.9	565.2	565.5	565.8	566.1	566.4	566.7	567.0	567.3	567.6	567.9	568.2	568.5	568.8	569.1
18.....	564.	564.3	564.6	564.9	565.2	565.5	565.8	566.1	566.4	566.7	567.0	567.3	567.6	567.9	568.2	568.5	568.8	569.1
19.....	562.1	562.4	562.7	563.0	563.3	563.6	563.9	564.2	564.5	564.8	565.1	565.4	565.7	566.0	566.3	566.6	566.9	567.2
20.....	562.8	563.1	563.4	563.7	564.0	564.3	564.6	564.9	565.2	565.5	565.8	566.1	566.4	566.7	567.0	567.3	567.6	567.9
21.....	566.5	566.8	567.1	567.4	567.7	568.0	568.3	568.6	568.9	569.2	569.5	569.8	570.1	570.4	570.7	571.0	571.3	571.6
22.....	561.1	561.4	561.7	562.0	562.3	562.6	562.9	563.2	563.5	563.8	564.1	564.4	564.7	565.0	565.3	565.6	565.9	566.2
23.....	564.1	564.4	564.7	565.0	565.3	565.6	565.9	566.2	566.5	566.8	567.1	567.4	567.7	568.0	568.3	568.6	568.9	569.2
24.....	564.8	565.1	565.4	565.7	566.0	566.3	566.6	566.9	567.2	567.5	567.8	568.1	568.4	568.7	569.0	569.3	569.6	569.9
25.....	560.9	561.2	561.5	561.8	562.1	562.4	562.7	563.0	563.3	563.6	563.9	564.2	564.5	564.8	565.1	565.4	565.7	566.0
26.....	560.9	561.2	561.5	561.8	562.1	562.4	562.7	563.0	563.3	563.6	563.9	564.2	564.5	564.8	565.1	565.4	565.7	566.0
27.....	563.8	564.1	564.4	564.7	565.0	565.3	565.6	565.9	566.2	566.5	566.8	567.1	567.4	567.7	568.0	568.3	568.6	568.9
28.....	562.9	563.2	563.5	563.8	564.1	564.4	564.7	565.0	565.3	565.6	565.9	566.2	566.5	566.8	567.1	567.4	567.7	568.0
29.....	565.5	565.8	566.1	566.4	566.7	567.0	567.3	567.6	567.9	568.2	568.5	568.8	569.1	569.4	569.7	570.0	570.3	570.6
30.....	564.6	564.9	565.2	565.5	565.8	566.1	566.4	566.7	567.0	567.3	567.6	567.9	568.2	568.5	568.8	569.1	569.4	569.7
Means.....	563.	564.4	565.4	566.4	567.4	568.4	569.4	570.4	571.4	572.4	573.4	574.4	575.4	576.4	577.4	578.4	579.4	580.4

[1812.]

FIRST MAXIMUM OF DECLINATION—Continued.

April.]

Observing time	<i>h. m.</i> 7 00	<i>h. m.</i> 7 06	<i>h. m.</i> 7 12	<i>h. m.</i> 7 18	<i>h. m.</i> 7 24	<i>h. m.</i> 7 30	<i>h. m.</i> 7 36	<i>h. m.</i> 7 42	<i>h. m.</i> 7 48	<i>h. m.</i> 7 54
Observing time	<i>h. m.</i> 1 19½	<i>h. m.</i> 1 25½	<i>h. m.</i> 1 31½	<i>h. m.</i> 1 37½	<i>h. m.</i> 1 43½	<i>h. m.</i> 1 49½	<i>h. m.</i> 1 55½	<i>h. m.</i> 2 01½	<i>h. m.</i> 2 07½	<i>h. m.</i> 2 13½
April 1.....	560.1	560.7	561.	561.6	561.2	561.4	560.6	560.4	559.5	559.5
2.....	561.8	561.8	561.6	561.1	561.7	561.6	561.6	561.4	561.4	561.4
3.....	562.9	562.9	562.8	562.7	562.7	562.7	562.7	562.7	562.7	562.7
4.....	564.	564.	564.	564.	564.	564.	564.	564.	564.	564.
5.....	564.	564.	564.	564.	564.	564.	564.	564.	564.	564.
6.....	570.2	570.9	571.4	571.3	571.7	571.3	570.1	569.6	569.5	569.5
7.....	562.2	562.9	562.7	562.5	562.1	562.5	564.	564.3	564.6	565.
8.....	565.3	565.7	566.7	566.7	566.	566.5	564.5	565.9	564.4	565.2
9.....	577.4	576.9	577.6	579.	579.5	578.6	579.6	578.1	578.	575.2
10.....	569.5	569.8	569.	568.7	568.	567.9	568.9	569.8	570.7	570.7
11.....	568.1	568.7	571.8	572.7	574.2	575.5	572.8	566.4	561.6	567.7
12.....	562.7	562.7	562.6	562.3	562.8	562.6	562.7	563.1	568.6	563.
13.....	564.3	568.3	562.6	560.2	555.5	568.3	614.2	591.3	584.6	575.5
14.....	569.1	575.	569.8	559.8	552.9	564.2	568.7	570.5	575.1	569.6
15.....	565.7	566.	564.1	563.	563.6	561.7	560.8	560.6	562.2	564.8
16.....	556.	554.4	553.3	557.5	560.4	563.8	566.9	569.	571.	571.6
17.....	562.9	562.	562.2	562.7	563.5	562.4	562.	563.3	564.5	564.1
18.....	564.2	564.1	565.4	561.8	561.1	563.5	560.2	549.	541.4	537.6
19.....	563.4	563.5	563.2	563.2	563.8	564.	563.8	563.8	563.8	563.5
20.....	564.8	564.7	564.2	564.1	565.	565.6	564.2	565.	565.5	565.
21.....	561.7	562.8	562.7	563.	563.1	563.1	563.4	564.	564.2	564.8
22.....	562.4	562.7	563.	563.5	563.3	562.6	562.7	562.7	562.7	562.8
23.....	566.8	567.	566.5	566.9	566.4	565.9	564.9	566.6	566.6	566.7
24.....	567.3	568.8	568.4	568.6	567.2	567.1	566.6	563.6	563.6	563.5
25.....	564.2	563.7	563.9	564.5	564.	563.3	563.2	563.9	564.4	564.8
Means.....	562.2	564.2	576.2	564.5	564.2	566.5	566.9	566.6	566.2	565.3

[1842.]

SECOND MAXIMUM OF DECLINATION.

April.]

Göttingen time. Observatory time	<i>h. m.</i> 18 00 12 19½	<i>h. m.</i> 18 06 12 25½	<i>h. m.</i> 18 12 12 31½	<i>h. m.</i> 18 18 12 37½	<i>h. m.</i> 18 24 12 43½	<i>h. m.</i> 18 30 12 49½	<i>h. m.</i> 18 36 12 55½	<i>h. m.</i> 18 42 13 01½	<i>h. m.</i> 18 48 13 07½	<i>h. m.</i> 18 54 13 13½
April 1.....	553.2	552.2	552.2	551.9	551.7	550.1	550.4	549.8	549.4	549.
2.....	557.1	557.4	556.9	556.6	556.2	556.1	555.6	555.	554.5	553.8
4.....	550.8	551.2	550.2	552.2	552.5	552.9	553.9	554.3	554.2	554.6
5.....	553.4	551.9	551.2	550.2	549.9	549.5	549.8	550.3	549.8	549.6
6.....	553.7	553.5	553.2	553.2	553.2	553.1	553.3	553.3	553.	552.3
7.....	548.7	548.6	548.3	548.3	548.1	547.6	547.4	547.	546.9	546.5
8.....	557.5	557.3	557.3	556.9	556.8	556.	555.8	555.3	555.2	554.6
9.....	553.4	552.7	552.9	552.4	552.2	551.8	551.7	551.4	550.4	550.5
11.....	555.1	555.5	554.7	554.6	554.7	554.3	555.	554.1	554.4	553.2
12.....	556.8	555.9	554.7	554.4	554.9	554.5	553.6	553.2	553.4	552.4
13.....	552.8	552.4	551.7	550.8	560.	559.7	559.	556.6	555.7	554.6
14.....	553.5	553.3	552.9	551.8	551.	551.	551.	551.	551.2	551.4
15.....	550.8	547.2	546.	544.4	546.2	548.5	547.	544.	545.5	547.
16.....	555.	554.9	553.8	553.4	554.2	554.6	554.8	554.9	554.1	554.1
18.....	558.3	558.	558.1	557.2	557.6	558.	557.	557.5	556.5	557.
19.....	553.6	553.6	554.9	554.4	554.8	555.	554.9	555.1	555.5	556.4
20.....	552.	551.7	551.2	552.5	552.6	553.6	553.9	551.7	555.7	556.4
21.....	557.	555.4	554.1	554.1	554.6	554.	553.3	551.6	550.5	549.3
22.....	554.	552.6	554.	553.7	554.	554.	553.7	553.9	553.7	554.7
23.....	552.9	555.1	553.3	552.7	552.8	551.4	550.2	550.	551.4	549.5
25.....	552.5	552.1	551.8	551.6	551.1	551.	550.8	550.9	550.8	550.8
26.....	553.7	554.	554.	554.	553.9	553.3	550.4	553.5	553.5	553.3
27.....	553.	552.6	552.2	552.2	553.	551.8	551.	551.	551.	550.2
28.....	554.	554.	554.1	553.7	553.5	553.9	554.2	554.1	554.3	553.8
29.....	556.	554.7	555.7	555.7	554.1	553.2	552.5	552.7	552.3	552.1
30.....	554.7	554.	554.2	554.1	554.	553.8	553.6	553.6	553.7	553.6
Means.....	554.3	553.9	553.5	553.3	553.3	553.1	552.9	552.6	552.6	552.8

April.]

FIRST MINIMUM OF DECLINATION.

{1842.

Göttingen time. Observatory time.	h. m. 3 00 20 19½	h. m. 2 06 20 25½	h. m. 2 13 20 31½	h. m. 2 18 20 37½	h. m. 2 24 20 43½	h. m. 2 30 20 49½	h. m. 2 36 20 55½	h. m. 2 42 21 01½	h. m. 2 48 21 07½	h. m. 2 54 21 13½
April 1	563.1	565.3	566.5	567.5	568.5	569.6	569.6	564.4	563.3	561.2
2	559.5	560.3	562.5	565.	564.1	564.1	564.1	566.	567.	567.3
3	557.2	555.5	555.5	555.2	558.1	558.1	558.1	558.1	558.1	558.1
4	555.5	554.3	554.8	554.3	554.7	554.7	554.7	553.3	553.0	554.
5	553.3	551.8	551.4	550.9	550.6	550.6	550.6	550.9	550.3	550.6
6	551.2	550.8	550.1	550.2	551.8	551.8	551.8	551.8	550.9	551.5
7	549.8	549.2	549.1	549.1	549.4	549.4	549.4	549.4	549.4	549.4
8	548.	548.2	548.1	548.1	548.1	548.1	548.1	548.1	548.1	548.1
9	546.9	546.2	546.1	546.1	546.1	546.1	546.1	546.1	546.1	546.1
10	545.5	545.2	545.1	545.1	545.1	545.1	545.1	545.1	545.1	545.1
11	544.3	544.2	544.1	544.1	544.1	544.1	544.1	544.1	544.1	544.1
12	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1	543.1
13	541.9	541.9	541.9	541.9	541.9	541.9	541.9	541.9	541.9	541.9
14	540.7	540.7	540.7	540.7	540.7	540.7	540.7	540.7	540.7	540.7
15	539.5	539.5	539.5	539.5	539.5	539.5	539.5	539.5	539.5	539.5
16	538.3	538.3	538.3	538.3	538.3	538.3	538.3	538.3	538.3	538.3
17	537.1	537.1	537.1	537.1	537.1	537.1	537.1	537.1	537.1	537.1
18	535.9	535.9	535.9	535.9	535.9	535.9	535.9	535.9	535.9	535.9
19	534.7	534.7	534.7	534.7	534.7	534.7	534.7	534.7	534.7	534.7
20	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5
21	532.3	532.3	532.3	532.3	532.3	532.3	532.3	532.3	532.3	532.3
22	531.1	531.1	531.1	531.1	531.1	531.1	531.1	531.1	531.1	531.1
23	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9
24	528.7	528.7	528.7	528.7	528.7	528.7	528.7	528.7	528.7	528.7
25	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5
26	526.3	526.3	526.3	526.3	526.3	526.3	526.3	526.3	526.3	526.3
27	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1
28	523.9	523.9	523.9	523.9	523.9	523.9	523.9	523.9	523.9	523.9
29	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7	522.7
30	521.5	521.5	521.5	521.5	521.5	521.5	521.5	521.5	521.5	521.5
Means	561.8	562.	562.8	562.8	563.4	564.2	564.2	564.3	564.8	564.9

[1842.]

SECOND MINIMUM OF DECLINATION.

April.]

Göttingen time.....	<i>h. m.</i> 13 00.	<i>h. m.</i> 13 06.	<i>h. m.</i> 13 12.	<i>h. m.</i> 13 18.	<i>h. m.</i> 13 24.	<i>h. m.</i> 13 30.	<i>h. m.</i> 13 36.	<i>h. m.</i> 13 42.	<i>h. m.</i> 13 48.	<i>h. m.</i> 13 54.
Observatory time.....	<i>h. m.</i> 7 19½	<i>h. m.</i> 7 25½	<i>h. m.</i> 7 31½	<i>h. m.</i> 7 37½	<i>h. m.</i> 7 43½	<i>h. m.</i> 7 49½	<i>h. m.</i> 7 55½	<i>h. m.</i> 8 01½	<i>h. m.</i> 8 07½	<i>h. m.</i> 8 13½
April 1.....	568.3	568.8	569.7	569.8	573.1	574.4	574.2	577.5	577.9	577.7
2.....	566.2	565.7	565.8	567.8	567.7	566.7	590.	567.6	567.	567.
3.....	568.1	568.3	567.6	567.1	569.2	567.	566.8	566.5	567.5	568.6
4.....	568.6	569.	568.	569.5	569.2	569.7	568.7	572.1	571.6	572.9
5.....	568.1	567.9	567.6	567.6	567.9	567.7	567.	565.4	.....	566.8
6.....	567.3	567.7	568.	568.1	567.9	567.8	567.7	568.	568.4	568.
7.....	574.3	574.7	574.7	573.4	574.7	574.	574.6	574.4	573.6	574.2
8.....	570.8	570.8	571.9	572.	572.3	572.3	572.6	572.7	572.5	572.9
9.....	575.4	574.2	573.5	571.	569.4	569.4	570.2	571.5	571.5	574.5
10.....	535.7	535.2	535.	535.6	535.3	536.8	537.4	537.7	544.7	547.2
11.....	564.1	567.7	563.8	563.4	562.4	560.3	560.6	558.3	557.8	556.4
12.....	568.	567.6	567.6	567.5	567.6	568.1	569.4	572.3	573.8	572.7
13.....	580.3	585.9	584.8	584.2	580.3	573.	577.5	581.9	580.8	583.1
14.....	574.1	572.4	571.3	572.6	572.6	573.	573.5	574.8	576.7	575.7
15.....	564.8	565.3	566.3	567.5	567.4	569.3	568.2	568.	568.3	569.
16.....	571.8	572.1	572.5	572.4	572.5	568.9	569.5	566.5	565.	563.5
17.....	568.	568.8	569.	566.7	564.6	561.7	561.4	560.6	561.7	562.1
18.....	570.5	570.4	570.	570.	568.4	568.	568.4	571.4	571.2	569.7
19.....	567.4	567.5	567.3	568.3	568.7	569.1	569.	569.	569.	569.
20.....	567.6	568.6	568.3	568.7	567.	567.	567.4	567.1	567.7	568.2
21.....	571.5	573.	572.2	572.8	572.2	571.6	573.6	572.2	571.9	571.7
22.....	572.6	572.	571.9	572.	571.5	571.2	571.1	571.	570.7	570.5
23.....	566.6	567.3	568.4	568.1	567.2	568.5	567.6	568.4	567.8	567.7
24.....	.....	570.5	572.	571.2	574.5	571.5	571.8	571.2	570.7	571.
25.....	573.6	572.7	572.6	573.8	574.5	573.4	572.8	572.1	572.4	571.7
26.....	570.9	571.7	570.9	570.6	570.8	571.3	571.4	572.1	572.1	571.5
Means.....	568.6	569.1	568.8	568.8	568.6	568.1	568.5	568.8	569.3	569.3

[1942.]

MAXIMUM OF VERTICAL FORCE.

APRIL.]

	<i>h. m.</i> 22 44 16 23½	Therm., Fah.	<i>h. m.</i> 23 10 16 29½	<i>h. m.</i> 22 16 16 35½	<i>h. m.</i> 22 22 16 41½	<i>h. m.</i> 22 29 16 47½	<i>h. m.</i> 23 34 16 53½	Therm., Fah.	<i>h. m.</i> 16 59½	<i>h. m.</i> 22 46 17 05½	<i>h. m.</i> 22 52 17 11½	<i>h. m.</i> 23 58 17 17½
Göttingen time.....												
Observatory time.....												
April 1.....	674.6	69.4	675.3	676.1	677.4	678.7	678.7	69.5	680.	679.5	678.8	678.8
2.....	700.	73.1	702.1	704.3	706.2	709.	711.3	74.	713.2	715.9	717.8	720.1
4.....	562.5	61.3	564.5	567.	569.2	571.5	573.5	62.2	576.	578.	579.8	582.
5.....	695.2	70.6	695.5	696.5	697.5	699.	700.4	70.3	699.9	700.5	701.	701.3
6.....	721.9	71.8	721.8	721.5	720.8	720.6	720.6	71.5	720.3	720.	720.2	720.1
7.....	741.	73.	741.8	742.5	743.4	744.	745.1	73.8	745.7	746.5	747.2	748.2
8.....	713.7	69.2	713.7	713.2	711.7	712.	712.2	69.	712.	712.	711.7	710.8
9.....	642.1	67.3	643.9	644.3	646.4	647.6	649.2	67.3	651.	652.	652.6	653.7
11.....	733.	73.5	733.	733.	733.	733.7	734.	73.2	731.	734.7	734.5	734.9
12.....	783.5	76.2	783.	782.2	780.7	780.	779.5	76.	778.2	777.	776.2	778.4
13.....	484.2	55.5	485.	486.	486.1	487.6	489.2	56.2	490.2	491.6	491.2	497.5
14.....	697.	70.	697.	697.	698.	698.5	698.9	70.3	698.9	699.3	700.	700.7
15.....	703.1	71.6	705.6	704.7	705.7	706.	705.6	71.3	705.6	706.5	707.	708.2
16.....	692.5	71.2	693.	693.	693.8	694.5	694.5	71.1	695.5	696.2	696.7	697.5
18.....	654.6	66.	654.2	653.8	654.	654.7	655.2	65.9	656.	656.5	657.	656.7
19.....	636.7	65.	637.	638.3	638.8	638.9	639.7	65.	639.8	640.1	640.2	640.5
20.....	750.9	73.7	751.	751.	751.2	750.4	750.6	73.5	751.	751.	751.	751.2
21.....	717.1	72.	718.	719.	719.	720.	720.3	71.7	721.	721.5	722.	721.5
22.....	645.	68.4	645.8	648.	649.5	650.9	652.7	69.	654.4	656.3	657.8	659.9
23.....	726.	73.	726.5	727.2	727.5	727.2	727.	728.	728.	729.	729.	730.
25.....	758.7	75.3	759.1	759.7	760.2	761.	761.	75.5	761.7	762.5	763.	764.
26.....	791.2	77.6	791.6	792.7	793.	794.	795.7	77.2	795.5	795.5	795.9	797.
27.....	612.6	63.6	612.1	611.5	610.8	610.2	609.3	63.	609.	608.9	608.9	608.5
28.....	604.7	63.	605.2	606.	606.5	607.	608.4	63.4	609.	610.4	611.5	612.7
29.....	697.5	69.	697.4	696.6	696.5	697.	698.4	69.	699.	699.	699.	699.
30.....	611.3	64.	611.9	612.	612.6	613.	613.3	64.	614.	614.2	614.9	615.
Means.....	682.7	69.4	683.3	683.7	683.7	684.4	685.	69.5	685.6	686.8	686.7	687.4
Reduced to 32° Fah.....	177.8		178.2	178.3	178.	178.4	178.8		179.1	179.5	179.7	180.1

[1842.]

MAXIMUM OF VERTICAL FORCE—Continued.

April.]

Glaciogen time. Observatory time.	A. m. 23 04 17 23½	Therm., Fah.	A. m. 23 10 17 29½	A. m. 23 16 17 35½	A. m. 23 22 17 41½	A. m. 23 28 17 47½	A. m. 23 34 17 53½	Therm., Fah.	A. m. 23 40 17 59½	A. m. 23 46 18 05½	A. m. 23 52 18 11½	A. m. 23 58 18 17½	Therm., Fah.
April 1	680.	69.	680.	680.3	680.	680.1	680.2	68.8	680.2	680.2	680.2	680.3	68.7
2	722.4	74.5	725.2	728.	730.	733.	733.8	75.	736.4	738.5	740.8	742.5	75.2
4	584.2	68.	589.	589.	591.5	592.4	594.5	69.2	595.2	597.5	599.7	599.8	63.3
5	701.	70.2	701.7	701.6	701.	701.2	701.	69.9	700.	699.5	699.3	699.1	69.5
6	730.2	71.5	720.4	720.8	722.	721.5	723.	71.	721.5	721.5	721.5	721.7	70.7
7	749.5	74.	750.5	751.5	753.	753.5	756.	74.3	756.7	758.	758.5	760.5	74.6
8	711.6	68.8	709.3	708.5	708.	707.	707.	68.4	708.3	704.8	704.5	704.1	68.
9	656.5	67.3	657.6	657.2	657.7	658.5	658.5	66.8	659.3	659.5	659.7	659.4	66.
11	735.1	73.3	735.1	734.	733.	733.3	733.7	73.	734.	734.	733.	733.7	73.
12	776.5	75.4	775.2	775.1	775.	773.6	772.7	75.1	771.	771.	770.1	768.7	74.8
13	500.	57.9	501.	502.5	504.1	507.2	509.7	59.	512.7	516.2	518.5	522.	60.
14	701.	70.2	701.	701.	700.	700.4	700.2	70.1	701.	701.7	702.	703.5	70.
15	708.5	71.4	705.5	705.7	704.	704.4	704.2	71.	704.8	707.	702.5	708.5	70.7
16	698.5	65.7	699.7	700.5	702.5	704.1	704.5	70.8	705.	706.	706.5	707.	70.6
18	657.5	65.1	657.7	657.5	656.7	657.7	658.2	65.4	658.	658.9	657.9	657.9	65.2
19	640.5	65.1	640.6	640.9	641.	641.	640.	65.1	640.	640.1	640.3	640.1	65.2
20	752.	73.7	751.5	751.5	752.	751.8	751.5	73.8	752.	751.3	751.8	751.8	73.6
21	721.5	71.7	721.1	721.5	722.	722.7	723.	71.5	723.	723.4	723.4	723.5	71.3
23	661.5	69.5	663.8	665.3	667.	668.7	670.3	70.2	672.1	673.8	675.1	677.1	70.4
23	730.5	73.2	732.5	733.5	732.6	733.	734.	73.1	734.	734.5	735.5	735.7	73.
25	764.8	76.	765.4	766.3	767.	767.9	768.4	76.2	769.2	770.6	771.2	772.1	76.3
26	797.	76.8	797.3	798.5	798.7	799.	798.5	76.4	799.1	798.9	798.6	798.5	76.
27	608.7	63.	609.	609.	608.7	608.9	609.	62.8	609.	608.8	607.5	607.5	62.7
28	613.5	64.	614.	615.	616.	617.	618.	63.7	618.5	619.	619.	619.4	63.3
29	615.3	64.1	616.	616.2	616.5	617.	617.	64.1	617.	617.5	618.	618.2	67.5
30	688.2	69.6	688.7	689.2	689.6	690.2	690.6	69.5	691.	691.7	691.8	692.3	69.4
Means	180.6	181.4	182.2	182.9	183.7	184.4	185.1	186.1	187.4	188.5	189.6	190.7	191.8
Reduced to 32° Fah.	180.6	181.4	182.2	182.9	183.7	184.4	185.1	186.1	187.4	188.5	189.6	190.7	191.8

April.]

MINIMUM OF VERTICAL FORCE.

[1842.

[97]

• 664

Göttingen time.....	h. m. 12 34	Therm., Fah.	h. m. 12 40	h. m. 12 46	h. m. 12 52	h. m. 12 58	h. m. 1 04	Therm., Fah.	h. m. 1 10	h. m. 1 16	h. m. 1 22	h. m. 1 28
Observatory time.....	6 53½		6 59½	7 05½	7 11½	7 17½	7 23½		7 29½	7 35½	7 41½	7 47½
April 1.....	635.	65.4	633.7	634.8	635.1	635.7	635.	65.	635.	635.7	636.	637.1
2.....	599.6	61.4	599.8	599.8	599.1	597.2	596.	60.8	594.4	595.3	596.4	598.
3.....	668.3	71.	670.3	674.1	677.4	681.7	685.	71.6	687.6	690.9	693.4	698.1
4.....	681.5	68.2	682.7	683.	682.6	681.4	681.4	68.6	680.6	680.	680.	679.2
5.....	685.9	68.	686.6	686.1	685.7	685.7	685.7	68.6	686.1	684.9	684.1	683.1
6.....	724.6	71.2	723.8	723.8	723.8	723.6	723.9	71.	722.4	722.7	723.	723.6
7.....	763.6	72.2	763.9	763.8	761.8	761.5	760.	72.2	760.	760.7	757.6	754.5
8.....	617.7	61.8	616.3	613.7	610.4	609.	608.6	61.8	606.1	606.4	603.6	603.7
9.....	693.	69.	692.	691.4	691.5	693.	693.	69.4	692.9	693.5	691.	695.
10.....	717.6	71.3	718.9	723.5	723.7	721.7	726.	71.5	726.3	725.8	728.7	729.1
11.....	623.1	60.2	620.5	620.8	612.6	612.4	606.2	60.	604.2	601.	599.	598.4
12.....	662.6	67.5	662.8	662.7	662.6	663.5	664.	67.7	664.5	664.6	664.5	665.9
13.....	711.5	68.2	708.	707.6	707.5	705.5	704.3	68.	703.2	702.7	702.6	702.7
14.....	639.5	66.5	638.7	639.3	641.8	642.8	642.5	66.7	643.	645.	645.6	646.6
15.....	636.6	66.5	638.1	640.7	641.8	644.2	646.3	66.7	647.6	650.2	651.9	653.3
16.....	653.6	61.	653.5	653.6	651.8	649.8	649.8	63.5	646.2	640.1	646.5	647.5
17.....	710.	67.9	709.1	708.6	708.9	708.	707.	69.	706.	704.3	704.	704.5
18.....	606.1	64.5	608.6	610.6	611.	613.2	616.2	66.2	619.	623.7	625.	631.3
19.....	581.3	59.8	579.7	577.6	576.9	576.	575.4	59.6	573.7	572.	571.2	570.6
20.....	665.6	66.8	665.2	665.3	665.5	665.6	664.7	67.	665.1	663.	663.	662.2
21.....	753.8	75.6	755.6	757.4	758.8	760.7	762.1	75.8	763.3	764.5	766.7	766.8
22.....	731.2	71.5	733.5	733.2	733.2	732.5	732.	71.6	731.3	730.7	730.4	730.4
23.....	659.2	65.	658.0	656.9	654.8	653.	651.8	64.5	650.	647.8	647.2	645.1
24.....	490.7	53.5	489.0	490.1	488.6	489.4	487.6	53.5	487.3	486.7	486.	486.8
25.....	720.	71.	720.2	720.6	721.1	720.5	720.5	71.	720.8	720.6	720.7	721.
26.....	534.3	57.2	533.8	533.	532.7	532.	531.3	57.1	531.	530.7	530.4	530.3
Means.....	650.4	66.4	650.1	650.1	650.	650.1	650.8	66.5	659.5	659.6	659.6	659.9
Reduced to 32° Fah.....	196.		195.4	195.1	194.7	194.5	194.		193.7	193.9	193.9	194.1

[1942.]

MINIMUM OF VERTICAL FORCE—Continued.

April.]

Station time Observatory time	h. m. 13 34 7 53½	Therm., ° Fah.	h. m. 13 40 7 59½	h. m. 13 46 8 05½	h. m. 13 52 8 11½	h. m. 13 58 8 17½	h. m. 14 04 8 23½	Therm., ° Fah.	h. m. 14 10 8 29½	h. m. 14 16 8 35½	h. m. 14 22 8 41½	h. m. 14 28 8 47½	Therm., ° Fah.
2 April	637.2	64.5	637.	637.6	637.	637.1	634.1	63.9	632.	630.2	628.7	626.8	68.2
3	631.7	60.	591.	589.4	586.1	586.	583.1	60.	582.	580.5	578.3	576.6	59.6
4	700.7	71.8	703.1	706.4	707.6	709.4	710.5	71.5	712.5	714.	715.3	717.	70.6
5	679.1	66.	679.7	679.4	680.8	678.5	679.	68.3	679.2	679.6	679.6	680.	68.3
6	683.	69.2	682.7	683.5	684.7	684.6	686.	68.9	687.8	688.6	688.2	689.8	70.3
7	723.1	71.7	723.2	723.4	723.5	724.5	725.4	72.4	726.3	727.	728.	729.2	72.8
8	753.	71.4	750.7	751.	748.4	752.	746.4	71.3	747.	746.5	745.4	.....	71.3
9	602.	62.	602.4	602.3	602.5	601.7	602.	62.8	602.3	602.6	603.1	605.	63.2
10	695.6	69.8	696.1	697.	697.7	698.2	698.5	70.	699.1	699.8	700.4	700.5	70.2
11	729.2	71.7	729.9	731.2	732.6	732.2	732.5	72.	732.7	732.3	732.1	733.	72.5
12	596.6	59.5	596.7	595.1	591.5	588.1	584.7	59.	582.2	581.1	580.4	577.1	58.4
13	668.9	68.	667.7	667.5	668.	668.5	669.5	67.8	670.	669.8	670.6	671.9	68.
14	702.5	68.7	702.	701.2	700.7	698.5	698.	69.	697.5	698.3	696.7	696.9	69.3
15	647.	66.9	649.	649.4	649.8	651.8	652.	67.	652.6	653.8	654.3	654.8	67.4
16	654.5	66.9	651.1	657.7	658.5	660.1	661.5	67.	663.	664.	666.6	668.5	67.4
17	644.5	69.1	643.	642.5	642.1	639.3	638.4	63.8	637.6	635.7	636.2	634.	62.8
18	704.5	69.5	705.	705.5	706.	705.3	705.3	69.5	705.1	704.4	704.9	704.9	69.9
19	633.	68.2	639.	643.2	644.7	651.2	655.	69.4	659.2	662.7	666.3	669.9	70.1
20	663.	67.	663.	662.6	662.7	662.	663.2	69.4	665.6	665.1	665.	665.	69.7
21	768.4	75.9	768.3	770.6	771.6	772.6	773.7	75.9	774.4	775.	775.8	776.	75.5
22	730.4	71.7	730.1	730.	730.	730.2	730.5	71.9	731.5	731.3	731.5	732.	72.
23	643.9	64.2	642.3	641.1	640.2	638.7	637.6	64.	637.5	636.3	635.	634.7	63.8
24	484.6	53.5	485.	483.8	484.2	483.8	483.9	53.5	483.9	484.1	484.	483.8	53.7
25	730.5	71.	730.	730.	719.5	719.6	719.9	71.	720.	720.9	721.4	721.4	71.
26	530.	57.2	539.6	*539.2	538.9	538.8	538.7	57.4	538.8	539.	539.3	539.8	58.
Means	659.9	66.5	659.9	660.3	660.3	660.3	660.2	66.7	660.4	660.6	660.8	657.6	66.8
Reduced to 32° Fah.	194.1		193.6	193.5	193.	192.5	191.8		191.5	191.3	191.	190.5	

* Supplied.

[1842.]

SECOND MAXIMUM OF HORIZONTAL FORCE.

April.]

Göttingen time. Observatory time.	h. m. 21 02 15 21½	Therm., Fah.	h. m. 21 09 15 27½	h. m. 21 14 15 33½	h. m. 21 20 15 39½	h. m. 21 26 15 45½	h. m. 21 39 15 51½	Therm., Fah.	h. m. 21 57½ 15 57½	h. m. 21 44 16 03½	h. m. 21 50 16 09½	h. m. 21 56 16 15½
April 1.	555.6	64.5	556.2	558.7	561.9	570.	571.8	64.8	558.4	562.2	565.8	567.7
2.	564.	68.3	566.7	563.7	566.	584.	563.2	69.5	569.	569.3	567.6	566.
4.	574.1	57.	567.1	566.2	566.2	563.7	566.	67.4	567.7	567.3	563.5	562.5
5.	589.	67.4	597.1	603.1	604.5	603.1	605.5	67.7	598.2	593.4	591.8	591.
6.	595.2	70.	592.9	592.6	592.1	593.1	593.1	70.	594.4	594.	593.5	596.5
7.	621.5	70.9	626.	624.9	624.2	625.5	619.3	71.1	620.5	617.1	612.2	607.9
8.	598.3	67.3	601.8	604.5	607.4	613.3	614.6	67.3	612.1	612.8	615.	.....
9.	608.	62.3	606.	608.4	606.1	605.6	604.6	62.3	606.9	605.3	604.9	604.8
11.	602.9	71.4	602.9	603.	603.5	605.8	606.6	71.6	606.9	605.5	606.4	606.2
12.	628.3	74.5	628.9	628.4	629.1	629.2	625.3	74.6	620.8	625.4	631.2	628.5
13.	609.6	53.2	571.7	572.	573.	573.	567.	53.4	569.5	564.6	565.8	561.7
14.	607.	67.5	604.2	604.5	596.4	592.2	594.2	67.8	600.4	599.5	596.5	605.2
15.	597.3	70.	606.1	621.6	617.	613.7	601.5	70.	602.5	609.	615.	620.3
16.	597.6	68.2	594.2	596.	597.5	590.1	579.	68.5	580.5	600.6	604.4	599.
18.	597.6	62.5	589.1	587.8	581.	579.5	577.	63.	577.2	577.7	573.2	577.2
19.	601.7	62.4	604.6	603.	601.	592.2	589.3	62.8	591.4	596.9	606.	604.
20.	623.6	71.1	623.6	622.	621.7	623.7	620.5	71.3	620.8	616.	621.6	619.4
21.	628.1	70.1	624.7	622.8	619.8	620.6	617.5	70.4	615.5	610.4	611.7	617.6
22.	607.2	66.4	607.5	607.6	613.5	608.8	612.7	67.	610.9	614.9	617.9	612.6
23.	624.2	71.4	626.	625.9	625.6	626.5	628.	72.	621.7	622.1	628.5	624.
25.	623.1	73.8	621.9	621.3	620.7	620.6	620.9	74.2	621.	620.4	620.1	623.5
26.	618.1	76.4	615.	616.	617.	618.2	614.3	76.8	616.9	616.8	619.1	621.3
27.	590.9	62.	598.3	595.3	593.7	593.5	588.5	61.9	583.1	577.5	574.	575.4
28.	545.	62.	550.6	552.1	552.3	552.3	548.5	62.2	548.5	544.3	548.6	548.6
29.	600.7	67.6	600.6	591.9	589.9	592.4	601.1	67.4	599.2	600.6	605.	597.3
30.	576.1	63.	578.	580.	582.8	580.5	579.5	63.	576.2	577.7	576.8	577.
Means	596.5	67.	597.4	597.9	597.5	597.	595.7	67.2	595.4	595.5	596.8	596.5
Reduced to 32° Fah.	502.		502.8	503.2	502.7	502.1	500.7		500.2	500.1	501.2	500.7

[1943.]

SECOND MAXIMUM OF HORIZONTAL FORCE—Continued.

April.]

Göttingen time. Observatory time.	h. m. 22 02 16 21½	Therm., Fah. 16 27½	h. m. 22 08 16 27½	h. m. 22 14 16 33½	h. m. 22 20 16 39½	h. m. 22 26 16 45½	h. m. 22 32 16 51½	Therm., Fah. 16 57½	h. m. 22 38 16 57½	h. m. 22 44 17 03½	h. m. 22 50 17 09½	h. m. 22 56 17 15½	Therm., Fah.
April 1	587.	65.	584.	589.7	582.2	588.7	592.3	65.2	593.	586.	576.	572.	65.3
2	597.5	71.6	591.6	595.	597.8	598.3	601.1	71.8	598.1	601.7	606.1	606.1	72.
4	565.	58.4	565.	568.	565.2	562.	563.1	59.3	562.7	564.1	563.9	560.7	60.
5	592.	67.8	598.4	598.8	599.3	607.5	602.4	68.9	600.2	598.3	594.3	596.	69.8
6	600.5	70.1	601.7	597.7	592.7	596.8	602.4	70.1	597.6	599.6	600.7	600.2	70.1
7	604.	71.4	609.6	605.3	612.2	607.	609.2	71.8	605.7	606.5	604.8	610.1	72.
8	612.5	67.1	609.9	610.7	610.5	610.8	609.6	66.9	610.2	612.5	612.2	605.5	66.7
9	566.4	63.3	567.3	566.5	567.8	573.	565.2	63.8	568.5	570.2	572.	572.	64.
11	602.9	71.7	602.3	597.8	597.	600.7	598.8	72.	607.7	604.5	602.8	604.7	72.3
12	628.8	74.4	630.7	629.7	624.9	623.	620.8	74.1	637.3	631.5	627.5	639.4	74.
13	572.3	53.7	577.1	585.	575.7	569.5	570.2	54.	564.	567.	579.3	599.4	54.3
14	594.6	68.	590.9	595.9	593.5	599.5	598.1	68.2	593.7	592.5	597.7	598.2	68.4
15	619.6	70.	.....	625.5	623.5	623.1	625.4	70.3	629.1	631.3	635.	631.2	70.5
16	595.5	69.1	602.	601.8	606.7	622.2	630.8	69.4	638.5	639.8	642.1	644.2	69.7
19	579.2	63.2	574.9	574.3	573.5	580.	583.3	63.5	582.3	588.5	585.7	589.	63.7
19	618.4	62.8	611.2	610.5	615.8	615.2	611.5	62.9	608.	606.7	604.5	606.1	63.
20	621.5	71.5	620.	622.	625.5	617.3	620.7	71.7	622.8	624.7	625.	622.8	72.2
21	624.9	70.6	632.6	635.	633.5	630.	634.	71.	634.3	634.5	635.7	631.	71.3
22	614.3	67.9	619.9	617.1	615.7	613.1	614.8	68.6	618.2	615.1	615.8	616.7	69.1
23	637.8	72.2	640.2	641.7	636.8	636.	632.6	72.8	632.	632.	632.	631.2	73.
25	623.	74.8	621.5	623.3	622.2	624.5	621.8	75.3	624.5	626.5	626.1	629.	75.8
26	639.4	77.	626.2	626.7	625.9	625.2	624.8	76.9	626.3	623.5	619.7	619.5	77.
27	576.1	62.	577.3	576.8	577.	577.7	580.3	62.	577.7	578.5	581.7	580.7	62.
28	551.	62.	551.6	550.7	551.5	552.7	555.	61.8	556.	557.8	557.4	561.7	61.6
29	601.5	67.3	608.5	609.5	.....	.....	.....	.....	.....	.....	.....	.....	.....
30	578.8	63.6	582.5	578.9	578.1	577.2	577.	63.7	576.	576.6	576.1	576.2	63.8
Means	598.8	67.6	598.9	600.4	600.2	601.2	601.7	67.8	602.2	602.8	602.8	603.2	68.1
Reduced to 32° Fah.	502.7		503.3	504.1	503.7	504.6	505.		505.3	505.7	505.5	505.8	

April.]

FIRST MINIMUM OF HORIZONTAL FORCE.

[1842.]

Getting time.....	h. m.	Therm., Fah.	h. m.	h. m.	h. m.	h. m.	h. m.	Therm., Fah.	h. m.	h. m.	h. m.	h. m.
Observatory time.....	1 02 19 21½		1 08 19 27½	1 14 19 33½	1 20 19 39½	1 26 19 45½	1 32 19 51½		1 38 19 57½	1 44 20 03½	1 50 20 09½	1 56 20 15½
April 1.....	601.	73.	602.5	598.2	598.2	602.2	603.9	73.	599.7	602.9	600.3	600.8
2.....	585.	61.	581.5	577.6	579.3	580.2	578.7	61.	582.7	582.2	580.5	588.
4.....	616.3	66.3	616.2	613.5	608.2	609.2	606.2	66.1	606.3	602.5	600.5	601.4
5.....	614.3	68.6	614.3	614.2	614.	614.1	613.5	68.3	613.3	612.	610.2	613.3
6.....	608.5	73.	612.5	609.9	610.5	611.3	613.	73.	611.7	612.	610.2	613.3
7.....	610.4	64.7	621.	619.8	621.7	622.3	621.	64.2	621.2	621.1	618.6	616.8
8.....	595.9	61.8	599.	600.5	600.4	599.7	598.5	61.7	597.1	597.3	593.8	592.8
9.....	644.8	71.7	644.6	654.7	654.6	644.6	644.4	71.4	644.2	643.2	643.	638.6
11.....	677.5	72.	678.	677.4	678.9	678.6	685.2	71.6	687.7	706.2	712.7	710.5
12.....	600.	60.3	599.7	594.7	587.2	590.1	595.7	60.8	596.7	596.2	592.	593.3
13.....	591.	67.7	592.2	588.5	593.3	598.3	605.7	67.2	609.	606.8	603.7	598.5
14.....	644.	68.5	648.5	652.2	671.5	671.6	660.5	68.	665.2	667.8	666.7	641.
15.....	622.	67.5	632.	622.7	624.	625.	624.4	67.3	626.2	625.	623.6	623.1
16.....	583.1	62.5	581.7	585.8	586.2	582.5	583.	62.5	580.3	579.2	581.	583.5
17.....	600.	64.3	593.7	594.3	593.8	600.	598.1	64.7	602.	609.2	614.7	613.4
18.....	638.8	72.	637.7	635.4	602.2	618.	611.3	71.5	621.5	627.	632.2	645.1
19.....	.....	69.7	632.3	632.	631.7	631.5	630.4	69.6	632.4	632.9	634.5	634.6
20.....	.....	70.2	.....	617.4	618.2	619.2	617.7	70.2	618.4	616.5	614.9	617.5
21.....	631.7	71.5	631.	631.4	631.2	632.5	632.1	71.	632.1	631.9	631.2	631.
22.....	631.	76.7	630.9	631.7	631.	630.	629.5	76.2	631.	631.7	633.6	633.
23.....	.....	74.5	637.4	636.9	637.	635.7	633.8	74.	630.5	628.9	627.5	629.7
24.....	592.8	61.	594.6	593.5	592.5	591.7	592.1	60.8	592.4	592.8	592.2	592.9
25.....	569.6	61.	569.3	567.5	567.5	566.3	565.1	60.8	565.1	563.3	562.9	559.8
26.....	597.2	65.5	597.2	597.1	598.5	598.	599.4	65.3	601.9	600.	602.	601.7
27.....	.....	63.7	587.5	587.2	588.	590.	592.7	63.4	594.9	598.6	596.2	596.
28.....	612.4	67.5	613.2	613.	612.8	613.5	613.4	67.3	614.9	615.6	615.2	614.7
29.....	517.4	517.5	517.5	517.4	517.3	518.1	518.1		519.8	520.7	520.5	520.2
30.....	.....	.....	.....	.....	.....	.....	.....		.....	.....	.....	.....
Means.....	612.4	67.5	613.2	613.	612.8	613.5	613.4	67.3	614.9	615.6	615.2	614.7
Reduced to 32° Fah....	517.4		517.5	517.4	517.3	518.1	518.1		519.8	520.7	520.5	520.2

1842.

FIRST MINIMUM OF HORIZONTAL FORCE—Continued.

April.]

Göttingen time. Observatory time.	<i>h. m.</i> 2 05 20 21½	Therm., Fah.	<i>h. m.</i> 2 08 20 27½	<i>h. m.</i> 2 14 20 33½	<i>h. m.</i> 2 20 20 39½	<i>h. m.</i> 2 26 20 45½	<i>h. m.</i> 2 32 20 51½	Therm., Fah.	<i>h. m.</i> 2 38 20 57½	<i>h. m.</i> 2 44 21 03½	<i>h. m.</i> 2 50 21 09½	Therm., Fah.
April 1.....	567.7	63.8	570.2	572.1	572.9	575.4	573.5	63.7	576.3	577.7	578.8	62.8
2.....	601.	72.8	602.	604.8	606.5	608.5	611.	72.7	613.1	616.2	609.9	73.6
3.....	592.1	61.	592.7	592.2	590.2	591.	594.3	61.	586.2	573.2	564.1	61.
4.....	601.	65.2	602.1	604.2	606.2	608.9	607.5	65.	611.9	602.5	608.	64.8
5.....	613.2	67.5	612.	611.4	612.2	611.	609.3	67.	608.2	606.9	606.8	66.5
6.....	614.	73.7	617.1	618.8	619.6	619.6	620.5	74.	621.9	618.7	619.	74.3
7.....	616.6	64.3	611.3	609.4	608.8	604.3	599.1	64.3	599.5	598.7	597.8	64.4
8.....	592.2	60.7	592.9	593.	593.9	594.8	594.2	60.3	594.	594.3	593.9	60.
9.....	633.4	71.	630.5	630.	631.9	634.	646.7	70.5	643.1	642.1	642.2	70.
10.....	703.7	71.	698.5	690.6	680.	670.9	659.7	70.6	654.	655.8	648.3	70.2
11.....	595.9	61.7	595.2	592.9	585.5	586.	587.4	62.3	590.	589.4	588.2	62.3
12.....	596.5	66.3	594.	595.5	597.6	604.5	607.	65.8	601.	596.6	596.7	65.4
13.....	652.9	67.5	655.2	657.5	661.4	670.5	646.7	67.	638.3	659.2	645.5	66.5
14.....	624.4	66.5	623.5	621.6	622.4	630.9	620.9	65.8	620.5	617.8	617.8	65.
15.....	584.5	72.5	583.7	584.9	582.5	583.3	582.2	62.5	582.9	586.5	587.	62.5
16.....	607.5	65.	610.2	615.3	613.7	614.2	617.6	65.3	613.6	614.2	614.7	65.6
17.....	641.2	71.	631.1	629.	650.2	651.4	651.3	70.6	646.	640.5	646.1	70.
18.....	635.6	68.7	633.2	633.9	635.	634.5	635.6	67.8	634.1	635.7	632.1	67.
19.....	619.	69.9	623.8	616.7	618.3	619.	620.	69.6	621.	619.	617.5	69.6
20.....	631.3	70.2	630.8	629.3	629.6	632.	631.7	69.6	631.6	629.8	630.7	69.2
21.....	631.1	76.	628.3	630.3	632.	635.9	632.5	76.	639.6	633.3	635.3	76.
22.....	631.3	73.7	630.5	630.5	630.2	631.	630.1	73.2	629.2	625.6	626.5	73.
23.....	592.3	60.	590.7	590.4	589.2	588.3	589.7	59.8	589.9	588.4	589.3	59.6
24.....	562.6	61.4	562.7	562.6	563.5	562.5	569.7	61.8	565.6	562.5	561.5	62.
25.....	597.	64.8	603.5	601.5	597.7	598.7	599.	64.5	600.5	601.6	601.4	64.
26.....	597.1	63.1	596.1	596.8	594.4	595.5	596.8	63.9	596.5	600.	601.7	63.7
Means.....	612.5	66.9	612.3	611.7	612.1	613.4	612.7	66.7	611.6	611.4	610.	66.5
Reduced to 32° Fah.....	518.3		518.2	517.7	518.2	519.6	519.		518.	517.9	516.6	514.

April.]

SECOND MINIMUM OF HORIZONTAL FORCE.

[1842.]

Göttingen time	A. m. 15 32 9 51½	Therm., Fah.	A. m. 15 38 9 57½	A. m. 15 44 10 03½	A. m. 15 50 10 09½	A. m. 15 56 10 15½	A. m. 16 02 10 21½	Therm., Fah.	A. m. 16 08 10 27½	A. m. 16 14 10 33½	A. m. 16 20 10 39½	A. m. 16 26 10 45½
Observatory time												
April 1	570.1	59.8	561.7	558.5	556.7	557.3	555.	60.	559.5	556.6	557.5	554.9.
2	590.3	57.3	593.7	595.3	598.7	600.7	599.4	57.3	599.	599.9	599.1	600.4
3	611.	65.3	613.1	613.1	613.1	613.1	613.1	64.5	619.1	619.5	619.7	622.5
4	596.3	65.5	593.	593.6	595.3	595.5	597.	65.5	598.6	598.9	598.6	600.3
5	598.3	66.4	597.7	598.	601.2	601.5	601.9	68.5	603.3	604.9	605.	603.5
6	616.9	70.4	619.4	618.4	622.	623.3	623.3	70.4	623.5	624.5	623.2	624.4
7	607.	67.7	606.7	608.4	608.8	610.8	610.8	67.8	612.4	613.	612.8	610.8
8	605.1	60.	606.4	606.	607.	610.1	610.5	69.9	612.4	614.	612.4	612.4
9	642.7	69.1	639.7	640.9	641.8	643.8	641.5	69.3	642.9	641.6	644.8	647.
10	636.3	71.3	636.7	638.	639.	638.5	644.6	71.7	642.6	644.6	642.7	646.
11	636.8	55.8	636.1	618.2	615.	613.5	611.3	55.5	605.6	605.7	603.2	605.8
12	610.2	65.3	612.5	613.1	614.5	613.8	614.7	65.2	615.	614.6	614.2	614.7
13	674.8	68.5	673.	678.4	680.7	680.3	687.2	68.6	685.9	683.6	683.2	684.4
14	643.1	64.5	645.8	643.1	643.4	641.5	642.7	64.7	639.4	638.1	638.1	649.
15	614.	63.2	616.7	616.6	619.8	621.2	619.5	63.5	619.	621.3	624.8	637.
16	606.	59.6	611.2	613.5	609.	612.7	617.5	59.6	619.5	617.1	616.3	614.2
17	610.1	68.8	611.5	621.6	615.8	620.	622.3	69.4	617.3	613.5	616.	617.1
18	631.6	69.	656.2	657.8	667.1	671.2	670.8	69.1	667.8	664.	661.5	656.7
19	613.7	60.	613.5	613.7	615.	613.	609.9	60.2	608.1	611.8	614.	615.5
20	636.4	67.4	640.8	638.7	638.9	637.1	639.5	67.5	639.9	639.6	638.5	638.8
21	657.7	72.7	659.5	660.5	660.8	660.	660.5	72.7	660.5	660.5	660.5	660.8
22	645.	72.3	645.1	645.	638.8	638.9	640.3	72.7	639.2	639.5	641.3	642.
23	609.6	62.3	604.2	603.6	602.6	602.4	601.9	62.3	603.4	604.	602.8	603.7
24	596.6	63.5	596.2	596.1	598.	591.2	591.7	63.5	594.1	591.	591.1	593.2
25	601.3	69.5	603.	603.4	603.9	603.6	605.5	69.6	605.3	607.2	607.7	608.1
26	600.4	57.8	599.4	600.	599.9	599.8	599.4	58.	599.1	600.5	601.3	601.2
Means	617.6	64.8	618.2	618.6	619.2	619.7	620.4	64.9	620.1	620.	620.	620.7
Reduced to 32° Fah.	539.		539.6	539.9	530.5	530.9	531.6		531.2	531.1	531.	531.7

SECOND MINIMUM OF HORIZONTAL FORCE—Continued.

April.]

[1842.

Göttingen time.	h. m.	Therm., Feb.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	Therm., Feb.	h. m.	h. m.	h. m.	h. m.	Therm., Feb.
Observatory time	16 33 10 51½		16 38 10 57½	16 44 11 03½	16 50 11 09½	16 56 11 15½	17 02 11 21½	17 08 11 27½		17 14 11 33½	17 20 11 39½	17 26 11 45½		
April 1.....	558.1	60.7	561.6	562.7	563.8	565.5	564.2	563.1	61.4	564.4	564.1	567.1	62.	
2.....	601.	57.3	600.	599.4	600.2	598.5	597.5	595.8	57.4	594.	596.4	593.3	58.	
4.....	624.2	63.4	627.5	628.	631.	628.8	629.2	633.1	62.4	631.5	635.5	636.3	62.	
5.....	601.	64.6	604.4	603.2	607.2	605.8	606.6	606.	64.2	607.5	606.2	606.	63.7	
6.....	606.2	68.7	608.4	608.	607.6	607.4	615.	609.8	68.9	611.2	608.5	607.3	69.	
7.....	624.3	70.4	625.4	624.	623.5	625.2	626.2	627.7	70.2	628.3	628.9	628.9	70.1	
8.....	611.3	68.	611.8	609.3	608.5	610.1	610.2	611.2	68.	610.1	612.	611.6	68.1	
9.....	614.2	59.7	614.6	613.7	615.3	615.	616.2	613.1	59.8	614.2	612.5	611.2	60.1	
11.....	647.6	69.5	646.7	646.3	641.2	640.8	644.5	642.9	69.7	644.	639.5	641.5	69.8	
12.....	646.4	71.9	642.5	644.5	639.4	640.3	638.1	637.7	72.3	638.5	636.7	637.1	72.7	
13.....	607.2	55.1	608.9	606.3	608.5	610.	604.7	606.1	54.8	603.7	596.5	610.8	54.5	
14.....	615.	65.3	613.6	614.8	615.5	615.9	614.9	614.1	65.6	616.2	617.2	618.2	65.8	
15.....	683.4	68.8	680.4	678.7	676.7	675.7	669.3	665.3	69.	667.2	669.9	661.3	69.1	
16.....	639.5	65.1	636.4	637.5	636.4	636.1	635.	635.6	65.6	634.7	637.2	634.5	66.	
18.....	631.4	63.8	631.5	632.	628.7	626.3	624.8	626.4	63.9	624.2	626.1	625.	63.8	
19.....	612.8	59.7	613.2	614.4	617.6	617.3	623.5	626.1	60.	623.2	616.5	612.3	60.2	
20.....	618.2	70.	616.4	618.2	611.1	620.2	622.9	625.1	70.4	615.4	611.3	615.7	70.6	
21.....	652.	69.3	647.7	644.	640.9	643.3	647.5	651.4	69.3	654.1	646.1	646.5	69.4	
22.....	615.5	60.6	608.2	605.4	603.3	602.7	609.8	607.7	61.	605.5	604.8	601.3	61.5	
23.....	638.6	68.2	639.4	640.8	641.4	641.6	639.4	641.5	68.4	642.5	641.8	638.2	68.8	
25.....	660.6	73.6	659.7	659.4	659.5	659.6	658.1	657.	73.6	667.	666.8	656.	73.6	
26.....	640.8	72.9	641.7	641.9	641.1	641.2	641.3	642.7	72.4	643.3	646.7	647.9	72.4	
27.....	603.5	62.2	602.5	602.5	602.8	603.6	604.8	604.3	62.1	606.4	604.7	603.7	62.	
28.....	578.	53.5	579.5	579.7	572.7	504.4	564.7	564.6	54.	560.7	558.2	556.7	54.4	
29.....	608.8	69.4	612.1	613.	609.	610.	608.4	614.7	69.1	609.4	607.	607.	68.8	
30.....	601.1	58.4	601.2	599.8	598.7	598.4	597.4	596.	58.8	596.	596.	596.2	59.1	
Means.....	620.8	65.	621.3	620.3	619.3	619.4	619.8	620.	65.1	619.5	618.4	618.1	65.2	
Reduced to 32° Fah.....	591.7		532.	531.1	530.	530.1	530.4	530.6		530.	528.9	528.5		

[1942.]

FIRST MAXIMUM OF DECLINATION.

[Mar.]

	<i>h. m.</i> 6 00 0 19½	<i>h. m.</i> 6 00 0 25½	<i>h. m.</i> 6 12 0 31½	<i>h. m.</i> 6 18 0 37½	<i>h. m.</i> 6 24 0 43½	<i>h. m.</i> 6 30 0 49½	<i>h. m.</i> 6 36 0 55½	<i>h. m.</i> 6 42 1 01½	<i>h. m.</i> 6 48 1 07½	<i>h. m.</i> 6 54 1 13½
Gottingen time.....	563.9	564.3	563.9	564.2	564.4	565.	565.3	565.5	565.3	565.7
Observatory time.....	563.6	563.3	562.5	562.5	562.7	563.8	562.7	562.9	562.7	562.8
May 2.....	564.1	564.7	564.5	564.	564.	564.9	565.	565.4	564.9	565.1
3.....	563.9	564.6	564.9	564.5	564.2	564.1	564.4	564.7	563.9	565.5
4.....	566.5	566.9	566.6	566.2	565.9	565.3	565.6	565.6	565.7	565.9
5.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10.....	563.7	564.3	567.5	569.	564.7	564.7	564.	564.7	562.7	560.7
11.....	564.1	563.5	563.9	563.9	564.7	564.4	564.	564.4	567.1	568.5
12.....	562.2	562.5	561.8	561.8	562.5	562.5	563.	563.2	563.1	563.
13.....	560.9	560.6	561.7	560.7	561.8	560.8	560.2	561.4	562.4	562.9
14.....	562.9	563.4	561.3	561.5	562.8	565.2	566.	566.4	567.2	568.2
15.....	563.7	564.8	566.5	568.5	567.9	564.6	564.6	561.8	560.4	561.
16.....	562.9	563.6	563.1	563.1	562.8	562.3	561.5	561.4	569.6	560.7
17.....	560.7	560.5	560.2	559.8	560.9	561.1	560.2	560.4	561.5	561.4
18.....	562.6	562.9	561.7	560.8	561.9	561.4	562.	561.6	562.3	561.7
19.....	561.	560.9	561.	560.9	561.7	561.6	561.9	561.5	561.6	562.5
20.....	561.1	561.	561.	560.9	560.8	560.9	560.9	561.2	561.3	561.1
21.....	561.	561.2	562.	562.	562.5	562.4	562.	562.3	562.5	561.9
22.....	568.2	567.9	565.6	566.4	565.7	565.4	564.	563.5	563.6	562.9
23.....	562.4	562.6	561.7	561.6	560.9*	561.6	562.2	561.7	561.2	561.1
24.....	564.1	562.1	561.5	560.5	561.	560.6	560.2	561.4	560.9	561.3
25.....	569.7	569.6	569.3	569.1	568.5	568.4	567.7	567.7	566.2	565.2
26.....	567.6	568.1	568.9	568.2	567.3	567.	567.7	567.7	566.2	565.2
27.....	564.6	566.7	566.3	566.	564.5	565.9	564.9	564.6	564.	564.4
28.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means.....	562.9	563.	562.9	562.8	563.1	563.	562.9	562.9	562.7	562.

Max.]

FIRST MAXIMUM OF DECLINATION—Continued.

[1943.]

[97]

674

Göttingen time..... Observatory time.....	h. m. 7 00 1 19½	h. m. 7 06 1 25½	h. m. 7 12 1 31½	h. m. 7 18 1 37½	h. m. 7 24 1 43½	h. m. 7 30 1 49½	h. m. 7 36 1 55½	h. m. 7 42 2 01½	h. m. 7 48 2 07½	h. m. 7 54 2 13½
May 2.....	566.5	568.4	568.8	568.7	568.9	567.1	567.3	568.2	568.5	568.8
3.....	562.7	563.2	563.5	563.7	564.2	564.1	564.1	564.5	565.	565.4
4.....	565.1	565.5	565.8	565.7	565.8	565.8	566.6	565.5	565.6	566.1
5.....	564.6	565.9	566.	565.9	566.	566.	568.4	568.2	568.	568.
6.....	566.	567.	567.3	567.8	567.8	567.8	567.8	568.2	568.	568.
7.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
8.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
9.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
10.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
11.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
12.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
13.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
14.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
15.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
16.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
17.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
18.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
19.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
20.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
21.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
22.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
23.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
24.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
25.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
26.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
27.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
28.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
29.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
30.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
31.....	567.7	568.2	568.5	568.2	568.4	568.4	568.4	568.2	568.	568.
Means.....	562.9	563.3	564.2	564.1	564.1	564.1	563.9	564.1	564.3	564.4

[1942.]

FIRST MINIMUM OF DECLINATION.

May.]

	A. m. 2 00 20 19½	A. m. 2 06 20 26½	A. m. 2 12 20 31½	A. m. 2 18 20 37½	A. m. 2 24 20 43½	A. m. 2 30 20 49½	A. m. 2 36 20 55½	A. m. 2 42 21 01½	A. m. 2 48 21 07½	A. m. 2 54 21 13½
Göttingen time										
Observatory time										
May 2	561.	561.	561.	560.6	561.	561.	561.5	561.1	561.2	561.1
3	561.2	562.4	562.5	562.8	562.7	562.5	563.1	562.8	563.5	563.5
4	560.	559.7	560.7	561.2	560.7	560.7	560.2	561.	561.	561.
5	563.	562.7	563.1	562.9	563.9	563.2	563.7	563.2	563.1	562.5
6	560.7	561.1	560.5	561.	561.1	561.1	561.8	562.7	562.	564.7
7	564.5	563.4	562.9	561.	562.4	560.6	561.8	562.2	561.9	562.3
8	561.1	561.1	561.	561.	560.5	562.2	562.3	563.1	563.	562.
9	563.	568.6	563.2	563.7	563.7	563.7	564.1	563.2	564.1	570.4
10	562.1	562.	562.	561.8	561.1	562.	561.8	563.8	563.	560.1
11	561.8	562.	561.9	562.	561.8	561.9	561.9	561.9	561.8	561.6
12	562.4	560.7	561.1	561.4	562.4	561.2	561.5	561.	560.5	561.3
13	558.7	559.1	558.4	558.6	559.1	559.9	559.2	558.5	558.7	558.5
14	562.	563.2	565.8	567.9	568.5	570.6	571.7	572.7	571.2	572.7
15	569.1	568.6	567.1	566.1	565.	564.	564.4	564.6	564.3	564.5
16	559.9	560.8	561.6	561.5	561.	562.5	566.9	567.7	567.8	569.
17	559.	559.1	559.2	559.5	559.2	559.1	559.	559.	558.	559.2
18	559.3	559.7	559.6	559.7	560.1	560.5	560.	560.4	560.3	559.8
19	558.9	558.7	558.6	557.3	558.2	559.7	558.5	558.4	558.	559.
20	560.6	561.1	561.1	561.1	561.9	560.9	560.4	560.3	560.5	562.2
21	560.2	560.4	561.4	561.1	560.7	560.6	560.8	560.4	560.9	560.6
22	568.7	569.	568.	567.	566.5	566.5	564.1	563.8	563.2	563.6
23	568.2	568.7	569.2	558.5	558.	558.	559.	559.3	559.2	568.5
24	561.8	561.1	560.6	560.9	560.6	561.	560.1	559.6	561.2	562.7
25	561.9	561.8	561.4	561.5	561.3	560.5	560.6	561.3	560.6	560.6
26	563.7	564.1	564.	564.6	565.	565.5	564.3	564.8	564.2	564.2
27	563.7	563.5	563.9	563.8	564.6	564.	564.1	564.	563.7	563.9
28										
29										
30										
31										
Means	561.8	561.9	561.9	561.9	562.	562.1	562.2	562.3	562.2	562.6

[1942.]

FIRST MINIMUM OF DECLINATION—Continued.

MAX.]

	<i>h. m.</i> 3 00 21 19½	<i>h. m.</i> 3 06 21 25½	<i>h. m.</i> 3 12 21 31½	<i>h. m.</i> 3 18 21 37½	<i>h. m.</i> 3 24 21 43½	<i>h. m.</i> 3 30 21 49½	<i>h. m.</i> 3 36 21 55½	<i>h. m.</i> 3 42 22 01½	<i>h. m.</i> 3 48 22 07½	<i>h. m.</i> 3 54 22 13½
Göttingen time.....										
Observatory time.....										
May 2.....	561.	561.1	561.	561.	561.	561.1	561.	561.	561.	561.
3.....	563.7	562.9	563.2	563.5	563.4	562.6	563.2	563.9	561.6	562.5
4.....	561.1	561.6	561.5	561.9	561.6	561.7	561.8	562.	561.8	561.9
5.....	563.4	562.5	562.9	562.6	562.6	562.6	563.	562.5	562.3	562.5
6.....	565.1	565.7	565.	564.	560.6	560.7	561.2	561.8	561.2	560.7
7.....	563.1	562.9	562.2	562.5	562.	561.2	561.2	561.8	561.2	560.7
8.....	564.2	562.7	563.1	562.4	562.6	565.5	564.	563.3	566.2	564.5
9.....	575.	571.6	566.	561.4	562.7	570.8	576.	575.	574.9	574.7
10.....	569.1	561.	562.	561.9	561.6	561.	560.4	560.9	564.2	563.
11.....	562.	561.8	562.	561.9	562.	562.	562.	562.	562.7	562.7
12.....	560.6	560.5	559.6	559.7	560.5	561.4	561.3	561.3	560.8	560.5
13.....	568.9	559.5	559.1	559.	558.5	559.8	560.3	561.2	560.9	561.1
14.....	574.	575.2	577.9	579.2	578.5	579.9	580.9	581.6	584.6	581.4
15.....	563.7	563.5	563.3	562.2	561.8	563.5	563.5	561.5	561.6	564.2
16.....	566.8	564.3	562.2	563.7	565.6	567.	566.8	565.4	565.2	564.
17.....	568.7	568.2	569.2	569.7	569.4	569.4	568.3	568.2	569.9	560.2
18.....	568.7	568.2	569.2	569.7	569.4	569.4	568.3	568.2	569.9	560.2
19.....	560.	560.6	560.8	561.5	562.	562.1	563.	562.9	563.1	563.4
20.....	559.2	561.	560.3	562.2	562.4	562.6	563.	562.4	562.	561.7
21.....	561.4	561.	561.3	562.2	562.4	562.6	563.	562.4	562.	561.7
22.....	560.4	560.1	561.1	560.2	561.3	563.	563.7	563.9	563.7	563.7
23.....	562.1	560.9	561.1	560.2	561.3	563.	563.7	563.9	563.7	563.7
24.....	558.7	558.7	558.9	558.7	558.	558.7	559.3	559.3	559.	558.6
25.....	562.	560.7	560.9	563.1	563.3	563.6	562.	562.	561.9	560.7
26.....	561.6	562.1	562.	565.2	565.5	565.5	565.5	568.2	570.7	571.4
27.....	564.2	564.2	564.2	563.9	564.8	565.	565.7	564.9	564.8	564.5
28.....	564.2	564.2	564.2	563.9	564.8	565.	565.7	564.9	564.8	564.5
29.....	564.2	564.2	564.2	563.9	564.8	565.	565.7	564.9	564.8	564.5
30.....	564.2	564.2	564.2	563.9	564.8	565.	565.7	564.9	564.8	564.5

M.A.T.]

SECOND MINIMUM OF DECLINATION.

[1842.]

[97]

678

Göttingen time Observatory time	<i>h. m.</i> 13 00 7 19½	<i>h. m.</i> 13 06 7 25½	<i>h. m.</i> 13 12 7 31½	<i>h. m.</i> 13 18 7 37½	<i>h. m.</i> 13 24 7 43½	<i>h. m.</i> 13 30 7 49½	<i>h. m.</i> 13 36 7 55½	<i>h. m.</i> 13 42 8 01½	<i>h. m.</i> 13 48 8 07½	<i>h. m.</i> 13 54 8 13½
May 2	571.2	570.8	569.9	569.5	568.2	566.5	564.1	562.4	560.3	558.6
3	571.8	571.9	572.	572.1	571.2	571.2	569.7	567.3	564.4	561.3
4	576.6	577.3	576.6	577.4	576.6	577.6	577.2	576.5	574.6	573.8
5	575.7	574.6	574.7	574.3	574.5	574.2	573.5	573.7	572.8	572.2
6	570.3	571.2	570.5	569.7	567.7	567.1	567.5	567.	564.6	563.7
7	571.3	571.1	571.1	571.4	571.	572.5	572.2	571.3	571.	570.8
8	574.6	574.7	573.1	573.4	574.5	573.4	573.4	573.3	573.1	572.1
9	571.8	572.7	573.5	572.	573.3	571.9	570.	569.2	569.	569.5
10	577.	577.	576.2	576.7	575.8	574.9	574.1	573.5	570.6	573.6
11	574.	574.6	574.8	574.8	574.2	574.6	574.3	574.6	574.6	574.6
12	567.7	567.9	568.8	567.7	567.7	567.6	565.3	568.	568.2	568.6
13	562.3	561.9	568.4	567.7	567.7	567.6	565.3	568.	568.2	568.6
14	568.1	571.6	575.1	576.6	576.7	576.9	570.1	567.8	570.7	568.6
15	572.3	571.7	570.6	571.1	571.1	568.9	567.7	566.9	565.9	566.8
16	562.7	563.6	564.	564.6	564.6	564.9	564.4	562.3	567.1	566.8
17	566.2	564.7	565.6	565.6	564.2	564.	564.6	563.7	563.	562.4
18	568.6	568.6	568.9	568.8	568.1	568.1	568.2	567.5	566.6	566.9
19	570.3	569.7	570.3	569.1	568.7	568.5	569.	568.5	568.6	569.3
20	562.	563.1	562.5	563.2	564.	563.6	563.1	561.6	562.2	561.6
21	574.6	574.	573.2	569.6	565.6	572.3	571.7	572.5	572.1	571.5
22	573.2	573.5	572.2	573.8	572.6	572.3	571.9	572.5	571.2	568.
23	571.3	571.6	571.6	570.2	569.2	571.3	571.1	570.3	571.8	570.1
24	577.1	575.	574.2	574.6	574.1	573.2	575.	574.5	573.2	574.2
25	574.4	574.	574.3	574.1	574.2	574.5	574.9	574.8	574.8	574.
26	576.	575.8	575.1	575.	575.5	575.	574.9	575.2	574.5	574.
Means	571.6	571.7	571.5	571.2	570.4	570.4	570.4	570.2	570.3	569.0

[1842.]

MAXIMUM OF VERTICAL FORCE.

MAY.]

Getting time Observatory time.....	h. m.		Therm., Fah.	h. m.		h. m.	h. m.		Therm., Fah.	h. m.		h. m.	h. m.		h. m.	h. m.
	22 04 16 23½	22 10 16 29½		22 16 16 35½	22 22 16 41½		22 28 16 47½	22 34 16 53½		22 40 17 00	22 46 17 06½		22 52 17 12½	22 58 17 18½		
May 2.....	530.6	530.2	57.3	530.	530.	530.	530.	530.	57.5	529.7	529.4	529.5	529.8	529.8	529.8	529.8
3.....	684.	683.7	68.3	684.2	684.	684.	684.	683.7.	67.9	683.5	683.	683.	683.	683.	683.	683.
4.....	771.6	771.7	75.1	772.2	773.	773.	778.	773.4	76.	773.5	773.4	772.7	772.5	772.5	772.5	772.5
5.....	715.	715.8	72.	716.	716.4	716.5	716.5	716.6	72.4	717.6	717.6	718.3	719.	719.	719.	719.
6.....	659.7	660.7	69.	661.2	662.	662.7	662.7	663.7	69.4	664.6	665.4	666.7	668.	668.	668.	668.
7.....	604.7	604.1	65.3	605.1	606.5	607.4	607.4	609.5	65.6	609.4	610.	611.	611.2	611.2	611.2	611.2
8.....	680.	681.2	71.	682.6	683.2	683.7	683.7	684.7	71.	685.7	687.	687.5	687.9	687.9	687.9	687.9
9.....	659.4	659.1	67.9	659.5	660.4	660.3	660.3	659.7	68.	659.	657.9	657.8	658.	658.	658.	658.
10.....	708.	709.5	73.7	711.	712.6	714.1	714.1	716.	74.3	717.5	719.1	721.	722.7	722.7	722.7	722.7
11.....	648.2	649.2	67.8	650.3	651.1	652.	652.	652.3	67.9	653.	653.	653.5	654.1	654.1	654.1	654.1
12.....	746.5	746.1	74.	747.	747.	747.	747.	747.	73.8	747.	747.	747.4	747.9	747.9	747.9	747.9
13.....	686.	686.1	70.	686.	686.1	686.7	686.7	686.6	70.	687.4	688.5	688.4	688.9	688.9	688.9	688.9
14.....	700.6	701.	72.	701.9	702.	702.	702.	702.1	72.	701.8	703.	704.	704.7	704.7	704.7	704.7
15.....	808.9	808.8	78.3	808.1	808.	808.	808.	808.4	78.8	809.	808.7	809.	809.	809.	809.	809.
16.....	697.	697.6	71.6	698.5	699.2	699.8	699.8	700.2	71.8	700.4	702.3	702.8	703.2	703.2	703.2	703.2
17.....	744.6	745.6	75.1	746.6	747.1	747.1	747.1	749.	75.1	749.7	750.2	751.1	751.5	751.5	751.5	751.5
18.....	482.3	482.3	54.1	481.3	480.7	479.8	479.8	479.2	53.5	478.1	478.2	477.8	477.7	477.7	477.7	477.7
19.....	723.1	723.6	71.9	728.4	727.8	727.2	727.2	726.8	71.7	726.2	725.9	725.4	725.	725.	725.	725.
20.....	762.9	762.8	74.7	763.	762.8	762.4	762.4	762.	74.6	762.4	762.6	762.5	762.4	762.4	762.4	762.4
21.....	795.	792.8	75.3	792.2	791.	790.2	790.2	788.2	74.7	787.5	785.2	785.2	784.7	784.7	784.7	784.7
22.....	775.7	777.2	77.1	777.2	778.1	779.	779.	780.2	77.1	779.8	780.6	781.5	782.5	782.5	782.5	782.5
23.....	808.3	807.4	76.4	807.5	807.	806.9	806.9	809.8	77.9	805.4	805.	805.	804.8	804.8	804.8	804.8
24.....	686.1	686.2	69.7	687.1	687.2	688.	688.	688.4	70.9	689.3	690.	690.4	690.	690.	690.	690.
25.....	782.	785.3	78.	785.4	787.	788.	788.	791.7	78.1	790.2	791.	791.	792.2	792.2	792.2	792.2
26.....	812.	812.6	79.4	812.9	813.	813.	813.	813.6	79.2	813.1	813.1	813.1	813.4	813.4	813.4	813.4
27.....	676.6	677.9	70.9	679.1	680.3	681.7	681.7	683.	71.	684.	685.	685.8	686.6	686.6	686.6	686.6
28.....	706.	706.3	71.4	706.7	707.1	707.4	707.4	707.9	71.5	707.9	708.2	708.6	708.9	708.9	708.9	708.9
29.....	173.7	173.8		174.	174.2	174.3	174.3	174.6		174.3	174.5	174.8	174.9	174.9	174.9	174.9
Reduced to 32° Fah.....																

[1842.]

MAXIMUM OF VERTICAL FORCE—Continued.

Mar.]

Göttingen time. Observatory time	h. m. 23 04 17 23½	Therm., Fah.	h. m. 23 10 17 29½	h. m. 23 16 17 35½	h. m. 23 22 17 41½	h. m. 23 28 17 47½	h. m. 23 34 17 53½	Therm., Fah.	h. m. 23 40 17 59½	h. m. 23 46 18 05½	h. m. 23 52 18 11½	h. m. 23 58 18 17½	Therm., Fah.
May 2	529.5	67.4	529.2	529.1	529.1	529.4	529.5	57.3	530.	529.9	530.	530.	57.3
3	683.	67.5	683.	682.9	682.7	682.7	682.	57.2	682.	682.2	682.5	681.8	67.
4	771.5	74.7	771.5	771.	771.	771.	771.	74.8	771.	771.	771.	770.8	74.8
5	720.7	72.5	721.	721.5	723.	723.	723.6	72.4	724.5	725.	725.7	728.	72.5
6	668.5	69.8	670.	671.2	671.7	671.	671.	69.8	672.	673.2	674.	675.	69.8
7	612.	66.	613.	614.	615.1	616.1	617.	65.7	618.2	619.1	620.	620.3	65.4
9	689.2	72.	690.8	692.5	693.9	695.9	696.5	72.4	697.9	699.7	701.	702.2	72.8
10	658.7	68.1	659.	659.5	660.2	660.9	661.6	68.2	662.2	662.7	663.3	664.1	68.3
11	725.5	74.6	725.5	727.	728.6	730.6	732.	74.8	733.8	735.	737.	738.1	75.
12	654.	67.7	654.6	655.2	655.	655.7	656.	67.5	656.	656.	657.	658.5	67.3
13	747.8	73.7	747.9	747.5	747.1	747.	747.	73.7	747.2	747.5	747.5	747.2	73.7
14	688.8	70.1	689.1	690.	690.	690.6	691.	70.1	691.4	691.6	692.	692.6	70.1
16	705.8	72.3	706.5	707.7	708.2	709.	709.6	72.2	710.5	711.	711.5	712.	72.3
17	809.	78.5	808.	807.5	807.7	807.3	807.1	78.3	807.7	807.2	807.6	807.	78.
18	703.4	72.	703.3	704.3	705.	705.8	705.7	72.2	706.	707.1	707.5	708.6	72.4
19	753.	75.3	753.2	753.9	754.7	755.	755.6	75.3	756.	756.8	757.	757.5	75.3
20	476.7	53.3	477.7	476.8	477.4	476.5	476.4	53.3	476.5	474.6	474.	473.5	53.2
21	724.4	71.4	724.8	724.4	724.5	724.	724.3	71.2	724.	723.6	723.3	723.9	71.1
23	762.2	74.5	762.	761.9	761.8	761.3	761.4	74.3	761.3	761.3	761.4	761.1	74.2
24	782.5	74.2	781.2	780.	779.2	777.5	776.2	73.8	775.2	774.	773.	771.6	73.3
25	783.7	77.	784.	783.7	784.4	786.1	786.	76.4	786.5	786.6	787.2	786.4	75.8
26	805.	78.3	806.	805.6	806.	805.9	805.7	78.2	806.	807.2	808.	808.2	78.
27	689.9	71.3	691.2	691.1	693.1	694.	695.4	71.5	696.	697.	698.	698.7	71.8
28	792.9	78.1	793.4	794.	795.2	795.9	796.2	78.1	797.	797.5	798.	798.8	78.1
30	813.7	79.	813.2	813.4	813.3	814.5	814.5	78.6	814.6	813.	813.1	812.5	78.2
31	689.3	71.3	690.	691.	692.1	693.	694.4	71.5	695.6	696.7	698.6	698.5	71.7
Means	709.2	71.6	709.6	709.9	710.4	710.7	711.	71.5	711.5	711.8	712.3	712.4	71.4
Reduced to 32° Fah.	175.1		175.7	176.2	176.9	177.4	177.9		178.6	179.1	179.8	180.	

[1842.]

MINIMUM OF VERTICAL FORCE.

MAR.]

	h. m. 12 34 6 53½	Therm., Fah.	h. m. 12 40 6 59½	h. m. 12 46 7 05½	h. m. 12 52 7 11½	h. m. 12 58 7 17½	h. m. 13 04 7 23½	Therm., Fah.	h. m. 13 10 7 29½	h. m. 13 16 7 35½	h. m. 13 22 7 41½	h. m. 13 28 7 47½
Gettogen time.....												
Observatory time.....												
20 May												
2	683.2	71.	686.2	687.9	690.	691.7	693.1	71.	693.6	695.1	696.2	697.1
3	676.5	72.	677.2	678.4	680.	681.2	682.7	72.	683.8	685.8	686.7	688.2
4	757.7	74.5	757.6	757.7	757.7	757.7	759.4	74.6	759.4	760.	760.	761.
5	587.5	60.8	587.	586.6	586.3	584.1	583.	60.5	582.4	581.6	580.6	582.
6	626.6	63.	627.	626.8	626.3	625.4	624.5	63.2	622.5	622.5	621.7	621.5
7	508.	55.	507.	506.	505.4	505.	503.4	55.	502.6	502.	501.7	501.
8	662.1	66.7	662.5	660.7	660.7	660.	660.5	66.8	661.6	662.3	660.8	657.7
9	627.1	64.7	627.	627.	627.	626.1	626.5	64.5	625.5	626.4	625.	624.3
10	670.	66.5	671.4	671.8	668.9	667.5	666.3	66.3	665.1	661.6	658.6	658.2
11	630.9	68.2	638.	643.1	646.	648.3	648.5	68.2	652.4	653.1	654.8	657.2
12	696.6	71.3	695.6	696.	696.4	698.3	698.5	71.4	694.4	699.9	702.1	702.4
13	657.6	67.8	657.7	652.2	654.2	658.7	655.2	67.9	667.	675.7	676.1	678.6
14	689.6	74.	691.4	693.1	695.8	696.1	698.7	74.	700.8	706.3	715.3	715.6
15	661.1	66.3	660.5	659.5	658.	657.6	656.9	66.3	656.	655.	655.3	654.2
16	663.6	66.7	663.2	663.2	664.	664.6	664.8	66.8	664.8	663.4	663.3	663.1
17	610.9	62.4	608.5	606.7	604.8	602.5	600.5	62.	599.1	597.2	596.	592.2
18	671.4	68.8	672.5	673.8	676.2	676.	677.4	69.6	678.5	680.2	682.2	683.7
19	733.9	76.7	737.2	741.	744.3	747.8	751.1	77.4	764.4	757.7	760.7	763.7
20	662.1	71.6	666.1	670.1	675.	673.8	683.	74.6	688.8	693.8	700.	705.4
21	752.	74.8	752.	752.9	754.3	754.7	754.6	74.7	754.6	753.6	754.9	755.5
22	807.1	77.	807.	807.	806.7	806.3	805.5	77.4	807.7	804.7	805.9	807.1
23	694.6	68.4	694.6	694.6	694.2	692.8	692.1	68.2	691.9	690.9	690.3	689.2
24	699.	71.3	698.5	700.2	701.9	702.6	704.8	72.6	705.6	707.2	708.2	709.5
25	676.1	69.	675.	675.	673.3	672.2	671.7	68.8	670.6	668.1	668.3	666.3
26	671.1	68.7	672.1	672.5	673.1	673.4	673.9	68.9	674.3	675.1	676.	676.5
27	176.8		176.2	176.	176.	175.7	175.6		175.8	176.4	177.1	177.4
28												
29												
30												
31												
Means.....												
Reduced to 32° Fah...												

[1842.]

FIRST MAXIMUM OF HORIZONTAL FORCE.

MAR.]

Göttingen time. Observatory time	h. m. 11 32 5 51½	Therm., Fah.	h. m. 11 38 5 57½	h. m. 11 44 6 03½	h. m. 11 50 6 09½	h. m. 11 56 6 15½	h. m. 12 02 6 21½	Therm., Fah.	h. m. 12 08 6 27½	h. m. 12 14 6 33½	h. m. 12 20 6 39½	h. m. 12 26 6 45½	Therm., Fah.
May 2	569.4	66.	564.9	570.5	570.	569.2	565.	65.9	570.3	570.7	569.9	572.2	66.
3	570.6	66.	572.7	573.7	571.2	573.5	573.	66.	574.2	575.5	580.7	583.	66.5
4	579.5	70.4	580.	579.6	579.3	578.8	579.1	71.	579.3	580.5	580.4	579.7	71.5
5	586.3	59.5	587.9	586.3	586.	585.2	585.3	59.6	581.8	583.	583.8	581.4	59.8
6	588.	62.4	585.1	580.7	580.8	581.2	580.5	62.	587.3	584.5	582.1	583.4	61.7
7	574.4	63.9	578.7	581.9	581.6	583.9	583.4	64.2	582.2	583.8	585.2	584.	64.
8	580.5	63.4	581.3	581.8	581.6	581.6	580.4	63.5	580.9	581.8	580.9	581.3	63.8
9	576.8	67.	575.5	575.	574.	575.7	573.7	67.8	574.5	577.	576.9	577.2	65.4
10	584.6	63.2	571.4	586.4	587.	578.6	587.6	64.2	591.9	592.9	588.3	604.4	64.8
11	580.3	68.8	581.3	582.3	582.5	582.6	582.6	68.8	587.1	588.5	586.5	586.5	68.8
12	578.8	65.3	578.4	577.7	578.3	578.3	578.3	65.	581.2	581.6	577.7	581.5	65.
13	587.6	66.3	587.7	585.	585.4	584.1	581.1	66.2	584.6	584.8	584.8	585.0	66.6
14	587.6	62.5	587.9	587.	587.9	584.2	583.2	61.7	583.2	583.6	583.6	583.9	61.
15	588.8	65.2	585.6	587.9	587.9	589.7	589.7	65.4	581.8	582.6	582.6	583.8	65.7
16	588.2	71.7	588.6	587.8	588.3	584.	582.2	73.2	583.6	585.2	585.9	584.4	74.8
17	586.5	72.8	584.2	589.7	589.7	589.7	589.7	72.5	581.7	581.7	581.5	581.5	68.5
18	585.	73.8	584.2	589.7	589.7	589.7	589.7	73.5	581.7	581.7	581.5	581.5	73.7
19	584.6	72.	584.6	584.2	584.3	584.4	581.1	72.5	581.7	581.8	581.6	581.6	73.7
20	584.9	68.	584.9	584.6	584.4	583.5	582.7	67.8	581.2	581.2	581.6	581.6	67.7
21	584.9	68.8	584.3	584.2	581.6	582.6	582.4	68.8	581.2	581.2	581.6	581.6	70.2
22	584.9	70.1	584.3	584.9	584.5	584.9	584.9	70.	581.2	581.2	581.6	581.6	65.
23	584.9	65.8	584.3	584.9	584.5	584.9	584.9	65.4	581.2	581.2	581.6	581.6	65.
Mean	585.2	66.5	585.5	585.5	585.9	585.5	585.5	66.7	585.5	585.5	585.7	585.3	67.
Reduced to 32° Fah.	585.5		585.7	585.7	585.9	585.4	584.4		584.5	584.6	584.9	585.3	

[1842.]

SECOND MAXIMUM OF HORIZONTAL FORCE.

MAY.]

Göttingen time..... Observatory time.	h. m.		Therm., Fah.		h. m.		h. m.		Therm., Fah.		h. m.		h. m.		h. m.	
	21 02 15 21½	21 08 15 27½	21 14 15 33½	21 20 15 39½	21 26 15 45½	21 32 15 51½	21 38 15 57½	21 44 16 03½	21 50 16 09½	21 56 16 15½	21 02 15 21½	21 08 15 27½	21 14 15 33½	21 20 15 39½	21 26 15 45½	21 32 15 51½
May 2.....	579.	575.6	573.1	572.1	570.6	568.	569.8	567.7	567.1	571.	579.	575.6	573.1	572.1	570.6	568.
3.....	577.8	577.9	579.5	582.9	583.7	583.4	585.1	586.7	586.1	583.4	577.8	577.9	579.5	582.9	583.7	583.4
4.....	590.4	588.7	578.2	582.8	581.4	585.	590.8	591.4	592.	580.2	590.4	588.7	578.2	582.8	581.4	585.
5.....	587.2	589.2	588.5	588.7	587.5	587.	587.7	589.1	588.5	590.7	587.2	589.2	588.5	588.7	587.5	587.
6.....	588.2	588.2	587.1	587.7	586.9	587.	587.7	589.1	588.5	590.7	588.2	588.2	587.1	587.7	586.9	587.
7.....	588.	581.7	580.2	578.1	577.	580.	583.3	577.8	580.	576.1	588.	581.7	580.2	578.1	577.	580.
9.....	587.5	580.1	568.4	551.4	547.6	561.5	562.	551.4	558.6	554.7	587.5	580.1	568.4	551.4	547.6	561.5
10.....	594.	589.6	586.6	587.7	588.	586.	590.7	588.1	588.	593.5	594.	589.6	586.6	587.7	588.	586.
11.....	615.1	616.6	616.4	618.6	618.6	619.4	618.3	619.9	619.3	620.7	615.1	616.6	616.4	618.6	618.6	619.4
12.....	585.3	587.8	590.5	590.1	590.2	593.7	594.2	595.6	595.6	596.	585.3	587.8	590.5	590.1	590.2	593.7
13.....	613.	613.5	615.8	625.4	624.9	638.4	640.	637.7	637.7	629.	613.	613.5	615.8	625.4	624.9	638.4
14.....	594.1	594.9	593.4	593.5	593.6	594.7	591.8	590.6	590.6	590.2	594.1	594.9	593.4	593.5	593.6	594.7
16.....	613.3	618.9	635.5	644.4	648.4	647.9	647.8	641.8	640.5	635.7	613.3	618.9	635.5	644.4	648.4	647.9
17.....	640.6	645.2	644.6	645.8	644.5	644.3	641.4	646.4	643.9	643.9	640.6	645.2	644.6	645.8	644.5	644.3
18.....	635.9	631.7	639.	643.2	639.5	639.1	640.4	636.	636.7	636.5	635.9	631.7	639.	643.2	639.5	639.1
19.....	658.2	657.5	651.2	653.2	652.7	658.6	659.7	658.7	659.	660.	658.2	657.5	651.2	653.2	652.7	658.6
20.....	596.	594.9	594.1	596.5	598.	597.5	599.5	601.4	599.	598.2	596.	594.9	594.1	596.5	598.	597.5
21.....	640.1	638.6	639.2	638.6	640.2	642.	643.8	638.8	640.	640.	640.1	638.6	639.2	638.6	640.2	642.
23.....	635.	634.4	634.1	634.	632.8	629.8	632.5	633.5	636.	638.6	635.	634.4	634.1	634.	632.8	629.8
24.....	645.	642.7	644.	641.5	640.2	642.	643.8	640.1	643.6	641.	645.	642.7	644.	641.5	640.2	642.
25.....	635.5	637.8	630.2	639.	639.5	632.3	630.5	629.2	629.9	634.5	635.5	637.8	630.2	639.	639.5	632.3
26.....	650.6	645.	641.8	642.	638.6	643.	643.8	637.1	648.1	647.1	650.6	645.	641.8	642.	638.6	643.
27.....	629.1	631.2	628.8	629.8	631.7	631.7	635.	636.7	637.5	638.3	629.1	631.2	628.8	629.8	631.7	631.7
28.....	650.5	644.8	647.7	652.1	659.8	653.4	650.1	648.	645.4	643.7	650.5	644.8	647.7	652.1	659.8	653.4
30.....	662.2	663.9	663.1	662.	663.8	664.	664.7	664.	663.5	663.6	662.2	663.9	663.1	662.	663.8	664.
31.....	630.2	629.6	629.7	627.2	626.9	625.7	626.1	626.2	625.2	625.2	630.2	629.6	629.7	627.2	626.9	625.7
Means.....	615.	615.6	614.3	615.7	616.3	617.2	618.2	617.6	617.4	617.6	615.	615.6	614.3	615.7	616.3	617.2
Reduced to 32° Fah.	516.7	517.1	515.7	517.	517.4	518.2	519.1	518.4	518.	518.1	516.7	517.1	515.7	517.	517.4	518.2

[1842.]

SECOND MAXIMUM OF HORIZONTAL FORCE—Continued.

MAY.]

Göttingen time.....	h. m. 22 02	Therm., Fah.	h. m. 22 08	h. m. 22 14	h. m. 22 20	h. m. 22 26	h. m. 22 32	Therm., Fah.	h. m. 22 38	h. m. 22 44	h. m. 22 50	h. m. 22 56	Therm., Fah.
Observatory time.....	h. m. 16 21½		h. m. 16 27½	h. m. 16 33½	h. m. 16 39½	h. m. 16 45½	h. m. 16 51½		h. m. 16 57½	h. m. 17 03½	h. m. 17 09½	h. m. 17 15½	
May 2.....	571.2	56.6	570.7	570.7	569.3	571.1	571.	56.5	570.6	571.7	572.1	570.8	56.5
3.....	585.3	66.	587.7	587.8	590.5	578.9	585.	65.8	583.1	585.4	589.4	589.8	66.
4.....	578.1	73.	584.6	584.6	592.2	602.3	606.8	73.2	605.4	603.2	599.	594.5	73.4
5.....	581.5	70.9	593.3	594.5	595.1	596.2	592.5	71.3	593.	594.6	596.	594.9	71.6
6.....	620.5	68.	623.	620.8	601.7	611.	616.5	68.5	615.1	614.5	619.1	617.	69.
7.....	577.	64.	569.	572.7	571.5	572.9	571.2	64.3	573.8	574.7	577.2	578.2	64.5
9.....	557.1	67.9	553.	549.7	540.2	537.7	539.5	68.2	542.2	544.7	542.7	543.5	68.5
10.....	603.	67.2	607.	607.2	636.	630.5	626.	67.3	619.7	605.7	603.9	607.2	67.4
11.....	620.	73.5	620.1	618.8	617.6	617.4	616.2	74.2	615.7	617.	614.8	619.7	74.8
12.....	597.8	66.2	598.1	600.2	601.5	602.	602.	66.6	601.7	602.	602.	603.5	67.
13.....	626.2	73.2	623.	625.7	626.8	625.	623.7	73.2	624.	626.1	627.3	632.7	73.4
14.....	590.7	68.7	593.4	591.9	593.	594.3	595.9	69.	598.8	600.5	598.8	599.	69.3
16.....	631.1	71.2	632.2	634.9	635.9	634.5	628.	71.7	627.7	635.	644.5	644.7	72.
17.....	648.8	78.3	650.7	650.5	650.	654.6	657.7	78.3	658.	657.2	661.5	669.	78.4
18.....	659.2	71.3	660.2	659.8	661.6	657.2	657.7	71.5	656.	658.2	659.	654.4	71.7
19.....	669.4	74.5	661.7	661.1	661.2	663.4	662.2	74.7	666.	666.3	666.	664.	74.9
20.....	600.3	53.2	600.	600.1	596.3	594.9	595.2	52.1	595.5	596.7	597.9	599.3	52.
21.....	642.	70.9	641.7	642.1	641.5	640.8	640.	70.9	641.8	643.9	644.2	642.9	71.
22.....	636.2	74.	642.2	644.8	644.8	634.9	626.2	74.	634.8	653.5	649.1	651.	74.
24.....	641.9	74.5	643.	640.9	638.3	639.2	637.5	74.	641.8	639.4	638.9	637.9	73.5
25.....	634.8	74.6	626.5	632.1	635.5	642.2	637.7	74.9	646.	644.2	648.3	654.7	75.2
26.....	661.8	77.5	660.4	649.9	653.8	656.2	652.5	77.3	651.3	651.9	655.5	655.1	77.
27.....	640.7	70.	639.	641.8	631.1	634.5	642.	70.5	642.7	639.7	630.6	635.7	71.
28.....	654.2	76.8	662.	664.4	665.	665.2	664.3	77.2	661.3	662.2	662.2	661.4	77.6
30.....	662.5	77.4	661.6	661.6	661.2	662.	662.	77.2	661.3	659.7	660.7	660.5	77.
31.....	625.7	69.1	627.9	630.3	631.1	632.2	633.4	69.9	633.8	634.2	634.	635.1	70.4
Mean.....	619.6	70.3	620.1	621.2	620.8	621.2	621.1	70.5	621.6	622.4	622.8	623.3	70.7
Reduced to 32° Fah.....	520.		526.5	521.5	521.	521.3	521.1		521.5	522.1	522.4	522.7	

MAX.]

FIRST MINIMUM OF HORIZONTAL FORCE—Continued.

[1942.

Göttingen time..... Observatory time.....	h. m. 2 02 20 21½	Therm., Fah.	h. m. 2 08 20 27½	h. m. 2 14 20 33½	h. m. 2 20 20 39½	h. m. 2 26 20 45½	h. m. 2 32 20 51½	Therm., Fah.	h. m. 2 38 20 57½	h. m. 2 44 21 03½	h. m. 2 50 21 09½	h. m. 2 56 21 15½	Therm., Fah.
May 2.....	579.7	56.3	578.3	577.9	578.	576.5	573.4	56.1	573.5	575.	575.2	575.	56.
3.....	595.5	63.2	595.	595.2	594.8	594.7	594.	62.9	592.7	594.	594.9	592.7	62.6
4.....	593.9	74.	595.5	590.	589.3	586.2	590.2	74.	592.	590.4	598.5	587.9	74.
5.....	607.	70.5	.....	606.2	606.	594.5	596.2	70.5	598.6	598.4	600.1	600.4	70.4
6.....	615.	69.2	.....	632.7	620.5	621.5	620.5	69.	620.5	618.4	618.	619.5	68.8
7.....	601.7	63.7	598.	598.	598.	598.7	598.9	63.5	599.7	596.3	598.4	599.	63.3
9.....	584.2	71.2	585.8	590.8	590.1	591.5	591.6	71.	588.6	587.1	589.	591.4	70.8
10.....	611.7	67.2	613.2	615.5	614.9	616.	616.4	67.1	620.8	621.3	623.6	617.	67.
11.....	641.8	75.	640.5	641.7	638.7	639.4	639.5	74.8	641.	638.7	631.3	632.4	74.7
12.....	607.7	65.6	607.5	608.5	607.4	608.4	609.7	65.3	611.	610.2	610.3	609.	65.
13.....	634.5	71.8	633.2	630.5	629.3	629.3	630.5	71.4	631.	630.8	629.1	626.6	71.
14.....	608.3	68.1	608.	608.7	608.7	609.3	608.2	67.8	608.5	609.	612.4	612.4	67.6
15.....	638.8	71.5	641.2	647.5	651.1	660.5	672.2	71.5	676.3	676.9	676.5	671.9	71.5
16.....	672.5	75.9	675.5	677.6	677.	674.7	674.	75.4	670.	666.	666.1	662.1	75.
17.....	660.5	71.3	659.5	657.4	657.4	660.4	656.1	71.2	648.8	651.3	644.2	641.5	71.1
18.....	670.	74.8	670.3	670.	671.2	671.7	671.7	74.3	673.2	672.8	671.7	672.7	74.
19.....	593.5	52.1	593.	595.6	594.8	596.7	596.2	52.5	596.7	597.1	596.5	598.9	53.
20.....	644.4	68.2	644.5	647.4	646.8	646.1	646.6	67.8	646.6	646.1	645.7	645.7	67.4
21.....	648.3	72.5	647.	647.4	647.	648.7	648.6	72.2	645.5	647.8	653.	653.8	72.
22.....	641.4	70.4	646.7	648.4	655.7	654.5	642.2	70.	645.2	640.2	645.5	637.	69.5
23.....	662.3	71.8	663.4	665.4	658.8	665.	665.4	71.6	659.5	657.	647.6	648.5	71.5
24.....	658.2	75.6	660.8	663.1	663.5	662.2	661.9	75.5	661.3	662.	661.5	659.6	75.4
25.....	653.2	72.	654.7	654.2	652.9	653.3	652.8	72.	655.4	657.2	651.	645.7	71.9
26.....	660.3	76.8	668.1	657.4	657.6	661.4	660.5	76.6	658.8	658.3	659.8	663.2	76.4
27.....	666.7	75.8	666.9	665.7	666.1	665.	664.1	75.2	663.1	662.	662.3	663.6	74.8
28.....	648.1	70.4	648.	648.4	649.	649.2	648.2	70.	649.5	648.4	648.9	648.9	70.
Means.....	630.7	69.8	633.1	631.9	631.7	632.1	631.9	69.6	631.6	631.3	630.7	629.8	69.4
Reduced to 32° Fah.....	532.4		533.9	533.8	533.7	534.3	534.2		534.	533.8	533.3	532.5	

[1942.]

SECOND MINIMUM OF HORIZONTAL FORCE.

Mar.]

	h. m.		Therm., Fah.	h. m.		h. m.	h. m.		Therm., Fah.	h. m.		h. m.	h. m.		h. m.	h. m.	
	15 32	9 51½		15 38	9 57½		15 44	10 03½		15 50	10 09½		15 56	10 15½		16 02	10 21½
Göttingen time.....																	
Observatory time.....																	
May 2.....	593.9		56.9	591.		590.8	590.8	591.5	592.1	592.7	592.7	594.2	592.9	591.7	591.7	591.7	591.9
3.....	613.2		66.9	614.9		611.2	611.2	608.	605.	604.7	604.7	605.2	606.4	606.	606.	605.2	605.2
4.....	607.9		70.3	606.5		603.	603.	604.2	602.7	600.	600.	605.9	606.	595.2	595.2	595.2	595.2
5.....	615.		69.	614.7		613.5	613.5	613.2	613.6	615.6	615.6	614.3	613.3	613.8	613.8	611.1	611.1
6.....	.....		61.4	626.9		617.4	617.4	619.6	622.	630.7	630.7	630.9	631.5	632.	632.	632.2	632.2
7.....	598.7		61.6	598.5		599.	599.	599.4	600.7	601.6	601.6	601.	601.	602.7	602.7	603.2	603.2
9.....	580.8		54.8	581.9		583.6	583.6	586.5	582.9	571.	571.	570.	573.7	568.4	568.4	569.8	569.8
10.....	600.2		63.6	600.5		600.	600.	601.4	601.7	601.9	601.9	603.	606.6	605.7	605.7	603.	603.
11.....	646.		65.6	642.6		640.	640.	641.3	639.7	639.8	639.8	638.1	635.8	633.	633.	632.	632.
12.....	638.		64.4	637.6		637.4	637.4	635.3	634.3	634.	634.	633.5	631.5	633.	633.	633.7	633.7
13.....	627.6		69.3	628.1		628.6	628.6	628.1	629.4	628.6	628.6	629.	607.9	606.6	606.6	605.5	605.5
14.....	612.7		68.	612.3		610.	610.	611.2	611.	609.7	609.7	609.5	607.2	607.2	607.2	601.2	601.2
16.....	658.		66.4	662.1		662.4	662.4	655.3	659.5	604.5	604.5	605.1	602.9	602.9	602.9	601.2	601.2
17.....	646.9		74.2	647.4		657.	657.	655.7	656.6	655.1	655.1	658.8	662.7	661.2	661.2	662.5	662.5
18.....	657.4		66.4	658.4		661.8	661.8	663.4	663.5	664.9	664.9	662.9	664.4	662.2	662.2	662.5	662.5
19.....	663.		68.1	666.4		663.4	663.4	664.7	662.3	660.3	660.3	662.	662.5	663.	663.	663.7	663.7
20.....	642.		57.1	641.5		639.6	639.6	638.2	636.	634.9	634.9	634.	630.6	628.6	628.6	624.6	624.6
21.....	666.8		69.6	666.9		667.6	667.6	669.5	670.2	668.5	668.5	667.2	665.6	664.3	664.3	662.4	662.4
23.....	669.		76.2	667.9		670.	670.	670.1	669.3	667.1	667.1	665.7	664.4	.....	.....	661.6	661.6
24.....	678.8		75.9	682.		681.1	681.1	679.8	678.4	684.6	684.6	686.	679.1	683.5	683.5	682.4	682.4
25.....	667.1		72.3	665.5		664.5	664.5	665.2	662.	667.	667.	663.3	661.	661.1	661.1	661.6	661.6
26.....	691.7		75.	691.5		694.9	694.9	699.4	699.7	701.4	701.4	701.8	693.	691.7	691.7	692.6	692.6
27.....	666.9		67.	667.8		661.9	661.9	664.4	661.	661.	661.	662.5	663.1	662.7	662.7	660.	660.
28.....	656.9		72.6	659.5		659.5	659.5	664.2	653.7	663.7	663.7	663.3	662.	661.5	661.5	656.3	656.3
30.....	657.2		73.4	656.7		656.4	656.4	656.2	655.3	657.	657.	658.4	657.9	656.2	656.2	659.4	659.4
31.....	651.		66.1	651.3		651.	651.	650.6	648.5	647.4	647.4	649.2	648.2	648.	648.	647.4	647.4
Means.....	639.9		67.4	639.6		639.4	639.4	639.8	638.9	639.5	639.5	638.8	638.8	637.5	637.5	638.1	638.1
Reduced to 32° Fah....	547.4			547.5		547.2	547.2	547.5	546.5	547.	547.	546.2	546.1	545.5	545.5	545.3	545.3

[1842.]

FIRST MAXIMUM OF DECLINATION.

JUNE.]

	<i>h. m.</i> 6 00 0 19½	<i>h. m.</i> 6 06 0 25½	<i>h. m.</i> 6 12 0 31½	<i>h. m.</i> 6 18 0 37½	<i>h. m.</i> 6 24 0 43½	<i>h. m.</i> 6 30 0 49½	<i>h. m.</i> 6 36 0 55½	<i>h. m.</i> 6 42 1 01½	<i>h. m.</i> 6 48 1 07½	<i>h. m.</i> 6 54 1 13½
Göttingen time.....										
Observatory time.....										
June 1.....	564.5	563.4	564.	564.	564.6	564.1	564.	563.9	565.	564.2
2.....	567.3	567.	566.3	567.4	565.3	567.5	565.6	565.	564.9	564.5
3.....	563.	563.9	563.8	564.3	564.3	564.5	565.2	564.3	565.2	565.3
4.....	563.6	564.4	563.9	563.7	565.5	564.7	565.4	565.3	565.9	562.8
5.....	560.3	560.	560.2	560.5	559.7	560.	560.	560.8	566.1	565.9
6.....	560.4	560.5	560.5	560.8	559.2	559.7	559.5	560.8	559.6	559.2
7.....	564.5	564.7	564.3	563.9	563.7	562.7	561.6	561.6	561.7	561.7
8.....	563.	562.8	562.1	561.4	562.1	561.6	561.7	561.	562.4	561.7
9.....	561.3	561.	561.1	560.9	560.9	561.	561.3	561.2	560.9	560.9
10.....	562.6	562.1	561.6	561.2	561.2	562.3	562.3	562.6	562.	561.8
11.....	573.1	568.4	561.	565.1	543.1	540.2	541.7	546.4	553.7	559.3
12.....	562.4	561.6	562.	561.5	561.2	562.3	562.2	560.6	561.	561.
13.....	564.	566.	568.9	571.6	574.9	577.	577.1	577.	574.8	573.
14.....	565.6	565.4	564.3	564.2	563.7	564.4	564.3	564.3	564.1	564.
15.....	567.	567.	566.2	565.3	567.1	565.9	564.6	564.9	564.5	563.9
16.....	563.	562.8	562.9	563.8	565.1	564.8	564.8	564.6	564.9	565.1
17.....	563.7	563.5	563.6	563.1	561.5	562.8	563.1	563.1	563.8	563.2
18.....	562.9	563.	563.1	563.	563.1	563.3	563.4	563.3	563.3	563.2
19.....	564.	564.1	564.1	565.	564.3	564.2	564.1	564.	564.	564.1
20.....	569.3	568.	577.7	575.3	574.1	569.6	565.9	563.8	562.7	563.
21.....	564.7	566.5	569.4	560.3	563.4	570.	572.1	572.7	575.2	574.1
22.....	567.	569.8	569.8	570.3	570.4	570.8	569.1	568.9	567.3	567.2
23.....	570.	569.6	570.8	569.5	568.9	566.2	567.5	567.4	566.8	568.6
24.....	566.9	565.2	564.7	562.5	561.7	560.8	560.	561.5	562.6	562.1
25.....	566.1	567.2	567.5	567.1	565.2	567.3	567.6	566.6	566.4	566.
26.....	571.	571.6	571.3	571.3	570.9	569.7	568.	567.7	566.9	567.
Means.....	565.4	565.1	564.8	564.4	564.1	564.1	563.9	563.9	564.1	563.9

[1842.]

FIRST MAXIMUM OF DECLINATION—Continued.

JUNE.]

	<i>h. m.</i> 7 00 1 19½	<i>h. m.</i> 7 06 1 26½	<i>h. m.</i> 7 12 1 31½	<i>h. m.</i> 7 18 1 37½	<i>h. m.</i> 7 24 1 43½	<i>h. m.</i> 7 30 1 49½	<i>h. m.</i> 7 36 1 55½	<i>h. m.</i> 7 42 2 01½	<i>h. m.</i> 7 48 2 07½	<i>h. m.</i> 7 54 2 13½
Göttingen time.....										
Observatory time.....										
June 1.....	564.4	564.3	565.	564.8	564.5	565.	564.	564.1	563.9	564.2
2.....	561.3	561.5	565.7	563.5	564.2	564.4	566.7	568.3	567.4	568.8
3.....	566.3	565.2	564.4	565.7	564.8	565.3	566.4	566.4	565.4	566.1
4.....	565.3	563.4	565.4	565.	565.1	564.9	563.	562.2	562.7	564.
5.....	567.7	559.6	568.6	566.7	565.2	564.1	563.7	563.7	565.	565.1
6.....	559.1	559.3	559.8	559.	557.9	558.3	558.	557.	556.6	556.5
7.....	562.3	560.8	561.	559.9	557.3	557.8	557.9	558.5	558.2	557.5
8.....	561.5	560.6	561.	561.1	560.6	560.	560.2	562.9	561.1	561.6
9.....	561.2	561.4	561.	561.2	561.2	561.2	561.3	561.5	561.8	562.
10.....	561.1	561.2	560.9	561.8	561.9	561.7	561.5	561.1	562.3	562.4
11.....	564.6	566.5	567.9	568.4	567.	567.3	567.5	567.3	566.6	567.2
12.....	560.7	560.5	560.2	560.5	559.9	560.4	569.6	559.8	561.2	561.1
13.....	573.1	572.7	573.7	572.	573.8	567.2	568.5	568.6	568.2	568.3
14.....	563.3	563.5	563.6	564.	563.8	562.4	560.	568.3	566.3	563.8
15.....	563.1	563.7	564.2	564.1	564.4	564.8	564.9	565.	565.	565.1
16.....	565.8	566.	566.6	566.8	566.8	567.	567.	567.1	567.5	567.3
17.....	562.8	563.7	562.5	562.5	562.3	562.4	562.6	562.6	562.6	562.5
18.....	563.4	563.5	564.4	564.4	564.3	564.7	563.5	563.9	564.5	564.5
19.....	564.	560.4	564.9	565.	565.1	564.9	565.	565.7	565.6	565.
20.....	563.5	562.6	564.5	566.	569.5	571.8	572.7	572.9	572.4	567.5
21.....	574.	575.	575.3	577.1	565.7	573.4	564.3	560.4	555.1	546.7
22.....	566.2	566.1	566.9	566.2	565.6	565.	565.3	565.3	565.7	565.5
23.....	568.	568.6	569.5	570.1	569.5	570.	571.	567.8	567.8	566.5
24.....	562.9	563.	563.2	562.7	562.5	561.7	561.9	562.4	562.2	562.8
25.....	565.9	566.1	566.2	566.6	566.	566.	565.7	565.	563.8	562.8
26.....	566.9	567.	567.3	567.3	568.6	568.5	568.	567.8	568.4	567.8
Means.....	564.1	564.	564.7	564.7	564.9	563.8	563.9	563.7	563.4	562.8

[1842.]

SECOND MAXIMUM OF DECLINATION.

JUNE.]

	<i>h. m.</i> 18 00 12 19½	<i>h. m.</i> 18 06 12 25½	<i>h. m.</i> 18 12 12 31½	<i>h. m.</i> 18 18 12 37½	<i>h. m.</i> 18 24 12 43½	<i>h. m.</i> 18 30 12 49½	<i>h. m.</i> 18 36 12 55½	<i>h. m.</i> 18 42 13 01½	<i>h. m.</i> 18 48 13 07½	<i>h. m.</i> 18 54 13 13½
Göttingen time.....										
Observatory time.....										
June 1.....	555.	555.6	555.	555.4	555.	554.	553.	552.6	553.	553.
2.....	548.5	544.8	548.3	547.7	547.	547.	546.3	546.7	546.7	546.5
3.....	552.5	552.6	552.8	552.5	552.7	552.5	552.3	551.4	551.	550.8
4.....	565.7	567.	568.	567.5	567.3	567.2	563.9	566.5	566.4	563.9
5.....	549.	548.6	548.6	548.	547.3	547.	547.1	547.	547.	546.8
6.....	544.1	544.1	544.	545.2	545.7	546.	546.1	546.1	546.	547.
7.....	543.7	543.5	543.4	543.2	543.7	544.1	544.	545.1	545.7	545.7
8.....	559.	559.	557.9	556.9	556.	556.3	554.5	552.2	554.	554.4
9.....	556.6	556.	553.	551.	548.	549.2	548.9	548.5	548.	548.
10.....	554.1	553.3	552.3	551.7	551.9	551.5	550.6	550.4	550.7	550.6
11.....	545.3	545.5	546.3	547.5	548.5	551.	554.4	552.4	548.	546.8
12.....	565.4	566.5	566.1	565.6	568.1	568.8	569.5	558.5	558.1	558.
13.....	559.2	558.	557.7	557.3	557.	556.9	556.5	556.7	556.	556.5
14.....	556.9	557.	557.	557.2	557.	558.	558.6	558.1	558.	557.4
15.....	556.2	556.	556.1	556.1	556.4	556.4	556.9	557.	557.	557.
16.....	554.5	555.4	553.6	553.5	552.9	553.6	553.5	553.2	553.	553.8
17.....	555.8	554.6	555.	555.	554.1	552.9	553.1	553.	553.1	553.1
18.....	556.2	556.4	556.5	556.5	555.5	555.2	554.5	554.1	554.7	554.5
19.....	556.2	557.4	555.9	556.7	554.	553.2	552.7	552.4	552.4	552.5
20.....	560.	568.3	568.1	568.	568.7	569.5	560.	569.2	569.	569.
21.....	555.3	555.9	554.4	554.4	554.2	553.	554.1	554.9	556	556.5
22.....	555.1	555.6	556.	556.	556.4	556.3	555.4	555.1	554.5	554.6
23.....	564.4	564.	563.9	565.	564.7	564.1	564.4	562.9	561.4	562.
24.....	554.	553.6	553.6	553.2	552.7	552.9	552.3	552.5	552.6	552.6
25.....	558.	557.4	558.	557.5	556.9	556.2	556.	555.3	553.8	553.5
26.....	551.3	551.4	551.	548.	543.2	538.8	535.1	534.1	536.3	538.7
Means.....	554.3	554.1	553.9	553.6	553.3	553.1	552.8	552.6	552.4	552.4

[1842.]

FIRST MINIMUM OF DECLINATION.

JUNE.]

	<i>h. m.</i> 2 00 20 19½	<i>h. m.</i> 2 06 20 25½	<i>h. m.</i> 2 12 20 31½	<i>h. m.</i> 2 18 20 37½	<i>h. m.</i> 2 24 20 43½	<i>h. m.</i> 2 30 20 49½	<i>h. m.</i> 2 36 20 55½	<i>h. m.</i> 2 42 21 0½	<i>h. m.</i> 2 48 21 07½	<i>h. m.</i> 2 54 21 13½
Göttingen time.....										
Observatory time.....										
June 1.....	559.5	560.	564.1	561.4	561.1	561.9	562.	561.8	560.4	562.4
2.....	571.1	570.9	569.5	569.5	568.1	568.7	571.5	573.1	577.8	578.3
3.....	562.6	564.	564.2	563.5	563.1	564.1	564.2	563.6	564.8	564.4
4.....	566.7	566.8	565.3	567.6	566.2	567.1	568.1	568.4	569.3	569.8
6.....	568.	568.	564.7	563.5	563.5	564.2	563.6	564.7	566.1	566.1
7.....	557.6	558.	557.7	557.2	557.4	557.	557.	557.3	557.1	557.1
8.....	558.6	558.	559.	561.2	561.1	561.2	561.	560.9	560.8	560.7
9.....	569.	567.6	568.	567.3	565.3	563.	563.	562.7	561.9	561.2
10.....	562.6	563.8	564.	563.6	563.2	562.7	562.4	562.4	562.8	563.3
11.....	558.8	560.7	560.7	562.3	564.1	563.6	563.6	561.8	563.2	563.5
13.....	571.5	569.	568.8	568.1	567.8	567.8	568.1	568.5	566.7	568.4
14.....	563.	563.6	564.6	565.	566.	569.	571.7	577.7	587.8	593.
15.....	566.4	566.	564.1	563.2	563.5	563.6	564.	564.4	563.7	563.5
16.....	561.	561.2	561.8	561.4	561.3	561.1	561.1	561.1	561.	561.
17.....	568.5	564.	564.	563.2	563.3	563.	563.	563.3	563.	563.8
18.....	563.	563.1	562.7	562.8	563.3	563.2	563.	561.7	561.4	561.5
20.....	564.1	564.2	564.2	564.1	564.2	564.2	564.	563.9	564.	563.5
21.....	563.	563.8	563.6	563.8	564.6	563.3	564.1	563.3	563.3	562.5
22.....	562.8	565.4	564.9	561.9	563.4	563.3	565.5	576.5	590.5	596.2
23.....	561.4	560.9	561.	560.2	560.5	562.5	563.6	565.6	564.7	565.2
24.....	563.4	567.3	569.6	567.8	566.2	564.1	563.8	560.7	563.2	565.7
25.....	575.	575.	573.1	572.3	572.	570.8	568.5	567.3	566.5	565.4
27.....	564.	563.3	565.9	567.3	568.	568.	567.5	566.8	566.1	566.
28.....	563.3	564.2	564.7	566.8	565.	564.2	564.	563.7	564.2	564.7
29.....	563.5	563.1	563.3	563.7	563.7	563.8	563.9	563.9	564.	564.
30.....	563.1	562.4	563.4	564.	564.5	565.	564.5	564.6	565.9	572.7
Means.....	564.1	564.3	565.7	566.2	566.2	566.4	565.	563.6	563.6	565.7

[1842.]

FIRST MINIMUM OF DECLINATION—Continued.

JUNE.]

Göttingen time.....	h. m. 3 00 21 19½	h. m. 3 06 21 25½	h. m. 3 12 21 31½	h. m. 3 18 21 37½	h. m. 3 24 21 43½	h. m. 3 30 21 49½	h. m. 3 36 21 55½	h. m. 3 42 22 01½	h. m. 3 48 22 07½	h. m. 3 54 22 13½
June 1.....	561.3	561.9	562.1	562.4	562.9	564.	563.3	563.1	563.1	563.2
2.....	578.9	577.3	574.3	573.1	571.1	567.6	566.9	567.3	566.3	565.4
3.....	563.9	563.5	563.9	563.5	563.4	562.5	562.8	563.4	563.	562.4
4.....	548.2	545.	548.	545.4	549.7	549.4	549.7	549.7	549.7	548.
6.....	565.1	565.	566.4	567.6	566.7	564.9	562.2	560.3	563.8	564.1
7.....	558.1	557.6	558.4	559.7	560.8	560.	559.8	559.7	559.1	558.9
8.....	560.3	561.	561.3	562.1	561.8	563.2	564.	562.2	559.2	557.
9.....	563.1	562.9	563.1	563.1	563.1	563.3	562.9	562.7	562.6	561.2
10.....	562.9	563.5	563.6	563.1	562.7	563.9	566.6	566.8.	565.5	563.6
11.....	572.7	571.5	569.5	572.1	571.8	569.2	570.8	568.9	569.	568.3
13.....	569.8	562.3	561.8	570.4	568.3	578.8	586.6	583.	574.	567.3
15.....	563.2	563.4	563.5	564.3	564.2	565.	566.6	568.2	566.8	569.
16.....	581.	561.	561.	561.5	561.5	561.7	561.8	561.6	561.8	561.9
17.....	564.1	564.5	563.9	563.9	564.	564.1	563.6	563.8	563.9	568.9
18.....	562.	562.5	563.7	563.7	563.6	562.9	563.2	563.7	564.5	569.7
20.....	563.9	563.6	563.6	563.7	563.4	563.2	563.4	563.8	564.	563.8
21.....	563.5	563.	563.4	563.6	563.5	563.1	563.6	562.9	563.	563.1
22.....	599.4	600.	597.4	599.1	591.	586.8	583.9	577.6	575.3	570.3
23.....	566.2	565.1	566.9	568.4	568.5	569.4	567.5	565.3	565.1	565.1
24.....	566.5	567.1	564.9	564.7	565.3	566.2	569.	567.8	567.6	567.6
25.....	565.4	566.2	566.7	566.9	567.3	568.	567.	569.3	569.3	571.7
27.....	565.8	566.	565.4	565.5	565.5	564.9	565.2	565.4	565.8	565.1
28.....	564.4	563.7	564.3	563.7	563.2	565.6	566.6	565.9	565.3	564.9
29.....	564.9	565.7	566.8	566.5	566.7	566.3	566.4	566.4	565.9	565.6
30.....	579.7	582.7	583.3	582.3	580.8	580.4	578.5	577.7	576.3	575.4
Means.....	566.8	566.3	566.3	566.2	566.4	567.5	567.7	566.7	566.3	565.4

June.]

SECOND MINIMUM OF DECLINATION.

[1842.]

	<i>h. m.</i> 13 00 7 19½	<i>h. m.</i> 13 06 7 25½	<i>h. m.</i> 13 12 7 31½	<i>h. m.</i> 13 18 7 37½	<i>h. m.</i> 13 24 7 43½	<i>h. m.</i> 13 30 7 49½	<i>h. m.</i> 13 36 7 55½	<i>h. m.</i> 13 42 8 01½	<i>h. m.</i> 13 48 8 07½	<i>h. m.</i> 13 54 8 13½
Göttingen time.....	575.6	575.2	575.5	574.6	573.4	573.8	574.2	574.2	574.2	573.8
Observatory time.....	576.	575.1	576.5	576.4	575.4	577.1	577.6	575.5	576.1	577.
June 1.....	579.	579.2	579.	579.9	577.7	577.6	577.6	578.1	577.2	576.5
2.....	578.6	579.	579.	578.	578.	578.9	577.	578.	577.	576.
3.....	574.6	573.8	573.8	572.7	572.6	571.3	572.2	572.5	572.7	573.2
4.....	575.5	576.	577.	577.5	576.	575.2	573.	574.	572.	570.8
5.....	570.6	570.	570.1	570.	670.	570.3	570.1	568.6	568.2	568.2
6.....	580.8	581.9	581.9	581.	582.	582.	578.2	579.6	578.5	578.2
7.....	584.3	584.7	585.	585.8	585.5	584.8	585.	585.	586.5	586.1
8.....	574.7	575.1	575.9	576.5	576.3	576.4	577.8	578.4	578.6	577.5
9.....	580.7	580.8	581.2	580.7	581.8	579.8	577.5	579.	576.7	573.3
10.....	569.7	560.2	561.3	562.6	562.9	565.6	567.7	569.4	571.7	572.1
11.....	570.	570.	570.	570.	570.	570.	570.	570.	570.5	571.1
12.....	573.	571.7	572.	573.2	573.	573.1	572.	571.	570.	570.
13.....	570.6	571.7	572.	572.	572.	572.	572.	572.	571.9	571.7
14.....	575.1	575.2	574.7	574.5	574.5	574.5	573.8	572.4	571.2	571.9
15.....	573.2	573.3	573.4	573.5	573.4	574.	574.4	574.7	574.7	574.8
16.....	571.1	572.	572.2	573.7	573.9	574.	573.9	574.	573.1	573.1
17.....	574.8	575.	575.9	576.3	576.	574.6	574.1	574.	573.6	574.3
18.....	571.2	571.6	571.7	570.	569.6	569.2	570.3	569.3	570.4	570.4
19.....	567.6	568.	567.5	567.	567.	570.	568.1	566.7	569.	566.5
20.....	572.8	573.9	575.4	576.1	577.2	578.7	579.3	581.	580.9	580.7
21.....	573.9	575.6	575.	574.	574.8	575.2	574.5	573.6	573.6	573.5
22.....	577.	576.3	576.4	576.6	576.1	576.2	575.7	576.3	576.7	577.6
23.....	575.	575.8	576.2	576.	576.	576.	576.	576.	576.	576.4
24.....	575.	575.	575.	574.2	576.	575.2	575.	573.7	572.7	571.2
Means.....	574.2	574.5	574.7	574.6	574.6	574.7	574.5	574.5	574.3	574.1

JUNE.]

MAXIMUM OF VERTICAL FORCE.

[1942.

[97]

696

	<i>h. m.</i> 22 14 16 23½	Therm., Fah.	<i>h. m.</i> 22 10 16 29½	<i>h. m.</i> 22 16 16 35½	<i>h. m.</i> 22 22 16 41½	<i>h. m.</i> 22 23 16 47½	<i>h. m.</i> 22 34 16 53½	Therm., Fah.	<i>h. m.</i> 22 40 16 59½	<i>h. m.</i> 22 46 17 05½	<i>h. m.</i> 22 52 17 11½	<i>h. m.</i> 23 58 17 17½
Göttingen time.....												
Observatory time.....												
June 1.....	661.	70.7	662.	663.1	664.6	666.1	667.3	71.3	668.7	670.	671.8	673.1
2.....	693.	73.7	696.9	700.	703.5	705.7	709.2	73.2	710.3	712.	713.7	715.2
3.....	672.5	70.7	673.	673.7	674.4	675.6	677.2	71.	677.6	678.6	679.	680.
4.....	.....	.....	.....	.....	.....	.....	.....	69.5	684.	685.	687.7	689.
6.....	735.7	74.9	736.	736.3	737.	737.	738.2	75.2	738.7	739.8	740.	740.5
7.....	626.4	67.8	628.3	629.4	630.9	633.4	633.7	68.	634.5	636.	637.2	638.1
8.....	612.9	65.5	613.8	613.2	613.9	614.	614.7	65.5	615.4	616.	616.7	617.
9.....	697.7	72.2	699.7	701.8	702.7	702.5	702.1	72.4	701.8	701.5	702.	701.
10.....	770.3	77.8	771.9	772.6	773.7	774.2	776.4	77.8	776.2	777.	777.9	779.
11.....	582.1	63.8	583.7	585.	585.9	586.5	587.2	64.1	588.6	589.1	589.	589.2
13.....	683.	71.5	684.5	686.	687.1	688.2	688.6	71.9	690.1	690.4	691.4	692.8
14.....	699.3.	72.2	700.8	702.6	704.4	706.2	708.5	72.4	708.6	709.	709.	709.4
15.....	753.2	74.7	753.8	754.6	759.	754.	755.1	74.5	755.7	754.2	758.	757.
16.....	808.	79.	808.9	809.4	810.	810.6	811.	78.9	811.5	811.5	812.3	813.
17.....	776.	76.3	776.6	776.7	776.	777.	778.	76.6	779.1	780.	781.	781.
18.....	810.3	79.	810.9	811.3	812.	812.8	812.5	78.8	812.7	813.	813.4	813.9
20.....	757.7	75.	758.4	758.9	759.1	759.3	760.1	75.3	760.6	761.	761.1	761.3
21.....	771.	78.	772.6	773.8	776.6	776.8	778.5	78.1	780.3	782.	782.5	784.
22.....	806.1	80.6	808.9	810.1	811.4	813.	814.4	80.9	815.9	817.	818.5	820.
23.....	796.8	78.2	796.5	795.6	795.1	795.2	795.1	78.2	795.	795.4	795.6	796.6
24.....	732.	75.5	733.1	734.7	736.	736.7	737.1	75.8	737.7	738.1	739.	740.3
25.....	763.3	76.	764.	764.5	765.	766.	766.1	76.	766.1	767.	767.3	767.5
27.....	813.4	79.2	814.1	814.6	814.1	814.2	814.3	78.5	813.7	813.1	813.2	813.
28.....	765.4	77.5	766.	767.1	768.1	769.9	771.	77.5	771.9	772.9	774.	775.
29.....	823.	81.	823.9	825.	826.1	827.2	828.1	81.2	829.1	830.	831.	831.8
30.....	864.5	84.4	865.5	868.9	869.	870.7	872.4	84.5	873.5	874.7	875.9	876.9
Means.....	738.6	75.	739.7	740.6	741.8	742.5	743.5	74.9	740.7	741.3	742.	742.5
Reduced to 32° Fah.	157.6		158.5	159.2	160.2	160.8	161.7		161.7	161.9	162.2	162.3

June.]

MAXIMUM OF VERTICAL FORCE—(continued.)

[1842.]

Göttingen time.....	h. m. 23 04 17 23½	Therm., Fah.	h. m. 23 10 17 29½	h. m. 23 16 17 35½	h. m. 23 22 17 41½	h. m. 23 28 17 47½	h. m. 23 34 17 53½	Therm., Fah.	h. m. 23 40 17 59½	h. m. 23 46 18 05½	h. m. 23 52 18 11½	h. m. 23 58 18 17½	Therm., Fah.
June 1.....	676.	71.7	677.	678.1	680.	681.	682.7	71.8	684.	687.	687.1	689.	72.
2.....	716.4	73.	717.2	718.5	720.8	720.7	721.1	72.6	722.	722.2	723.5	723.5	72.3
3.....	680.8	71.2	681.8	682.7	684.	685.5	686.8	71.2	688.	689.	690.5	692.	71.3
4.....	651.	69.6	651.	651.2	651.	650.	649.4	69.5	649.	648.	648.2	648.	69.5
5.....	738.7	75.7	741.2	743.2	744.	744.8	746.	75.7	746.5	747.5	748.5	749.7	75.7
6.....	739.	75.7	739.	739.8	739.	739.	739.	75.7	739.9	739.6	739.6	739.7	75.7
7.....	619.2	65.8	617.	618.5	618.	618.5	618.5	65.4	619.	618.9	619.1	619.4	65.
8.....	701.1	72.5	702.	703.	702.9	703.1	703.8	72.8	706.	707.	708.3	709.	73.1
9.....	781.	78.1	781.8	782.1	784.	785.	786.9	78.2	789.	789.	788.2	789.	78.4
10.....	590.1	65.5	591.	592.	593.	594.8	596.	65.3	597.	598.8	599.	600.5	64.8
11.....	693.	72.	695.	696.	696.6	697.1	697.1	72.	698.	697.9	697.3	696.5	72.
12.....	709.6	72.5	710.6	710.5	710.4	710.8	709.5	72.5	711.2	712.	713.	715.	73.5
13.....	765.6	74.3	755.	755.5	754.7	755.5	755.2	74.2	754.7	755.5	755.2	755.4	74.1
14.....	813.	78.8	813.5	814.	814.5	814.5	815.	78.8	815.	815.	816.	816.	78.7
15.....	781.4	75.9	782.	782.	782.1	782.	782.9	76.	782.8	783.	783.	783.2	76.
16.....	814.1	79.	814.1	814.1	814.9	815.	815.	79.	816.	816.	816.3	816.8	79.
17.....	781.9	75.2	782.	782.	782.1	782.	781.8	75.4	781.6	781.4	782.5	782.	75.6
18.....	785.	78.2	786.1	787.	787.9	789.	789.	78.1	790.	791.	792.	792.7	78.
19.....	821.8	81.	823.	824.	825.	826.1	827.7	81.2	828.1	829.	830.	831.7	81.1
20.....	795.	78.2	794.	793.3	794.	794.9	796.	77.9	796.	796.5	795.6	795.3	77.5
21.....	741.5	76.2	742.4	744.	745.	746.1	748.	76.3	749.2	750.8	751.	752.	77.4
22.....	757.8	76.1	757.8	758.1	758.6	759.	760.	76.	760.6	760.8	761.	762.	76.
23.....	812.4	78.2	811.1	810.	809.5	809.	808.	78.	807.	805.7	806.9	806.5	77.8
24.....	777.2	78.	778.2	780.	780.3	781.9	782.8	78.3	783.8	784.9	786.	786.9	78.5
25.....	832.5	81.5	833.1	834.	835.	835.5	836.8	81.5	836.9	839.	839.	840.	81.5
26.....	877.6	84.4	878.3	879.	878.8	880.	880.3	84.2	880.6	881.2	881.5	882.	84.
Means.....	743.1	75.	743.7	744.3	744.8	745.4	745.9	75.	746.5	747.1	747.6	748.1	74.9
Reduced to 32° Fah.....	162.6		163.3	163.9	164.5	165.2	165.8		166.5	167.3	168.	168.7	

JUNE.]

MINIMUM OF VERTICAL FORCE.

[1842.]

[97]

698

Göttingen time.....	<i>h. m.</i> 12 34 6 53½	Therm., Fah.	<i>h. m.</i> 12 40 6 59½	<i>h. m.</i> 12 46 7 06½	<i>h. m.</i> 12 52 7 11½	<i>h. m.</i> 12 58 7 17½	<i>h. m.</i> 13 04 7 23½	Therm., Fah.	<i>h. m.</i> 13 10 7 29½	<i>h. m.</i> 13 16 7 35½	<i>h. m.</i> 13 22 7 41½	<i>h. m.</i> 13 28 7 47½
Observatory time.....												
June 1.....	595.2	62.2	594.5	593.9	592.4	592.2	592.	62.3	591.7	591.	591.1	591.1
2.....	608.7	63.	609.2	608.6	608.	608.	608.	63.2	608.	608.9	608.6	608.9
3.....	599.	62.	598.5	598.5	598.6	597.6	597.5	62.2	597.	596.2	597.	596.9
4.....	639.	65.3	638.5	638.	637.7	636.7	636.5	65.1	636.2	635.	635.	635.
5.....	731.3	71.3	731.1	728.4	726.7	725.4	724.5	71.3	722.7	722.6	721.1	719.7
6.....	598.7	62.6	598.	597.5	598.7	597.4	596.5	62.4	595.7	595.3	588.5	587.6
7.....	539.6	59.	538.6	539.6	538.7	538.6	538.5	59.	538.	538.	538.	538.
8.....	610.	63.9	610.1	609.4	609.	609.2	609.2	63.9	609.3	609.9	610.7	610.
9.....	720.9	70.8	720.3	719.8	719.7	718.8	717.7	70.8	717.3	716.9	715.6	715.5
10.....	616.	63.2	615.9	615.8	615.	613.8	610.3	62.6	609.7	607.6	607.	606.2
11.....	572.9	61.	572.9	572.8	572.7	572.5	572.4	61.	572.1	572.	572.	572.
12.....	701.5	69.	701.2	699.4	697.8	697.7	697.	69.	695.9	695.7	695.5	695.4
13.....	703.	69.8	702.4	702.	702.	702.	702.	70.	700.6	700.4	700.1	700.
14.....	727.	71.9	727.	726.5	726.5	727.	725.1	72.2	726.	726.	725.	725.2
15.....	776.7	75.	776.4	776.2	775.6	775.7	774.9	75.	774.7	773.8	770.3	772.8
16.....	753.5	73.8	753.1	753.	753.	752.8	752.5	73.9	752.2	751.7	751.6	751.6
17.....	760.6	74.6	760.4	760.	759.7	758.7	758.	74.3	757.4	757.2	756.7	756.5
18.....	716.	71.6	716.2	716.	715.9	715.2	715.	71.7	715.	715.	715.	715.
19.....	739.4	72.3	739.4	739.2	738.3	736.	735.7	72.5	735.	734.7	735.3	735.7
20.....	775.3	76.2	774.8	772.7	773.3	773.3	772.7	76.4	772.	772.6	772.2	772.3
21.....	715.2	70.3	714.	712.	710.6	709.6	709.7	70.3	707.	706.9	707.	705.
22.....	703.1	70.7	703.	703.	703.	703.	703.	70.7	703.	702.3	701.4	700.5
23.....	735.	73.7	735.	735.	735.	736.1	737.	73.8	737.5	737.6	737.7	737.8
24.....	720.	71.6	720.5	720.	720.	719.9	718.4	71.5	717.5	716.2	716.	715.
25.....	752.2	74.	752.	752.	752.	752.	752.	74.3	752.	752.	752.	752.
26.....	756.	74.	756.	756.	756.	755.	755.	74.4	755.	755.	755.5	756.
Means.....	686.8	68.9	686.5	686.	685.6	685.3	684.7	69.	684.2	683.9	683.3	683.1
Reduced to 32° Fah.....	188.		187.6	187.	186.4	185.9	185.2		184.5	184.	183.1	182.7

JULY.]

MINIMUM OF VERTICAL FORCE—Continued.

[1842.]

Göttingen time..... Observatory time.....	<i>h. m.</i> 13 34 7 59½	Therm., Fah.	<i>h. m.</i> 13 40 7 59½	<i>h. m.</i> 13 46 8 05½	<i>h. m.</i> 13 52 8 11½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 14 04 8 23½	Therm., Fah.	<i>h. m.</i> 14 10 8 29½	<i>h. m.</i> 14 16 8 35½	<i>h. m.</i> 14 22 8 41½	<i>h. m.</i> 14 28 8 47½	Therm., Fah.
June 1.....	591.2	62.4	591.2	591.2	591.4	591.7	592.6	62.7	591.8	592.1	592.5	593.	63.
2.....	609.1	63.3	609.	609.7	610.	610.	610.1	63.4	610.8	610.2	611.	612.2	63.9
3.....	597.	62.5	598.	598.1	598.	598.	598.	63.8	599.	599.5	600.	600.8	63.2
4.....	634.7	65.1	634.5	634.2	634.	634.9	634.8	65.2	635.	635.	635.	635.	65.2
5.....	719.	71.4	718.5	717.6	716.3	715.	715.	71.4	715.	714.9	715.1	716.6	71.6
6.....	586.	62.3	586.4	585.7	585.4	585.	585.	62.4	585.	584.5	584.3	584.3	62.4
7.....	538.	59.	538.5	537.7	538.	537.6	538.9	59.	539.7	540.	540.	540.	59.
8.....	609.5	63.8	614.2	610.4	610.1	608.9	609.4	64.2	610.1	610.7	610.9	611.	64.4
9.....	715.	70.8	714.6	714.6	714.5	713.6	713.4	70.8	714.1	714.6	714.7	715.	70.8
10.....	604.6	62.4	603.6	603.2	602.7	599.7	598.5	62.2	598.	596.6	596.	595.8	62.
11.....	572.1	61.4	572.	572.	572.	572.3	572.7	61.7	574.8	575.9	576.8	578.	62.5
12.....	695.	69.	695.	695.	693.3	692.7	691.3	69.3	690.5	690.1	690.	689.8	69.3
13.....	699.9	70.	699.6	699.3	699.2	699.	698.9	70.1	698.8	698.5	698.3	697.9	70.3
14.....	734.4	72.5	725.	724.9	725.	725.2	725.1	72.6	725.5	725.5	725.6	726.	72.9
15.....	774.6	75.	774.8	776.8	776.8	775.8	776.4	75.2	776.	776.	775.4	775.2	75.2
16.....	751.4	74.	751.2	751.5	752.	751.5	751.6	74.3	751.1	751.3	751.5	752.	74.5
17.....	756.4	74.2	756.	754.6	754.7	753.3	752.6	74.2	752.1	751.4	750.6	750.6	74.
18.....	715.	71.9	715.	715.	715.	715.	715.	72.	716.	716.	716.	716.	72.
19.....	725.5	72.6	725.7	726.	726.2	726.	725.8	73.	726.3	726.4	726.5	726.6	73.2
20.....	772.3	76.4	772.	772.	772.7	773.	773.	76.5	773.2	773.6	774.	775.	76.7
21.....	704.9	70.3	704.	704.	704.	706.9	706.7	70.2	700.2	699.7	698.7	697.3	70.2
22.....	700.5	70.7	700.	700.	700.	699.	698.8	70.8	699.	699.5	700.	700.	71.
23.....	738.1	74.3	738.2	739.	740.7	741.8	741.9	74.3	742.2	742.7	743.9	744.5	74.5
24.....	715.	71.4	715.	715.	714.	713.6	713.	71.4	712.3	711.4	711.2	711.4	71.3
25.....	763.	74.6	762.	761.	761.	761.	761.2	75.	761.2	761.9	762.	762.1	75.3
26.....	756.	74.3	756.	757.	757.	758.	759.5	75.3	759.8	760.	761.	762.	75.8
Means.....	683.	69.1	683.1	682.9	682.9	682.6	682.7	69.2	682.6	682.6	682.8	683.	69.4
Reduced to 32° Fah.....	182.4		182.1	181.5	181.1	180.4	180.1		180.4	178.8	178.4	178.1	

[1842.]

FIRST MAXIMUM OF HORIZONTAL FORCE.

[June.]

Göttingen time. Observatory time	h. m. 11 33 5 51½	Therm., Fah.	h. m. 11 38 5 57½	h. m. 11 44 6 03½	h. m. 11 50 6 09½	h. m. 11 56 6 15½	h. m. 12 02 6 21½	Therm., Fah.	h. m. 12 08 6 27½	h. m. 12 14 6 33½	h. m. 12 20 6 39½	h. m. 12 26 6 45½	Therm., Fah.
June 1	608.6	61.8	610.1	601.2	609.6	610.6	612.2	61.7	611.5	610.9	609.7	609.3	61.7
2	619.6	62.3	619.3	618.5	618.1	618.	620.6	62.2	620.6	620.7	622.5	622.7	62.4
3	618.	61.7	618.	619.5	620.8	621.7	622.	61.7	623.7	624.5	624.5	625.7	61.7
4	624.4	64.6	625.6	626.5	627.4	628.	630.3	64.6	630.	630.2	630.9	631.5	64.5
6	673.	71.5	670.5	668.7	668.9	670.6	671.3	71.	671.4	673.6	673.6	677.8	70.6
7	644.1	61.7	646.	644.3	642.7	642.7	641.6	61.5	641.2	640.1	639.3	640.1	61.5
8	622.5	57.8	622.3	622.	623.4	623.4	625.8	57.7	627.3	627.3	628.2	630.9	57.8
9	629.4	63.4	629.	633.	623.5	619.7	621.5	63.5	617.2	614.7	609.8	609.4	63.5
10	602.7	70.8	601.7	598.8	596.6	595.4	595.8	70.7	596.4	596.7	599.2	600.3	70.5
11	628.7	62.4	628.5	627.8	627.7	627.5	627.2	62.3	627.	627.	626.7	627.2	61.6
13	618.2	60.4	617.	616.3	616.8	617.	617.	60.5	617.5	617.7	617.	617.2	60.4
14	685.4	69.6	684.6	684.	683.7	683.5	684.3	68.5	686.2	686.4	689.	693.2	68.4
15	672.3	69.3	671.5	671.1	669.8	667.9	668.3	69.3	668.4	668.9	670.	671.7	69.3
16	687.7	71.5	670.2	670.	668.5	670.6	669.	71.4	667.	665.9	665.4	666.	71.3
17	670.2	74.7	670.6	671.6	672.1	673.5	673.8	74.7	674.6	675.5	674.9	674.2	74.7
18	656.8	73.3	656.3	655.8	655.7	654.	653.	73.2	653.3	653.7	654.3	656.3	73.3
20	684.8	74.	684.8	684.8	684.8	684.	683.7	73.8	683.7	683.4	683.	683.	73.7
21	658.5	70.8	657.4	656.2	656.	656.	655.8	71.	656.	655.5	655.	655.1	71.2
22	660.9	71.7	660.1	659.8	659.	658.4	659.3	71.6	663.4	663.4	662.8	662.3	71.7
23	672.3	75.4	670.1	669.8	669.5	669.3	671.3	75.5	678.3	681.1	678.5	671.7	75.3
24	674.4	70.	679.7	677.2	660.2	667.5	669.7	69.3	656.7	653.2	669.7	672.	69.
25	660.	70.3	659.4	659.3	658.5	656.7	654.9	70.5	654.3	654.3	654.6	655.9	70.2
27	668.2	73.3	668.	668.	668.	668.	668.	73.5	668.1	668.3	668.7	669.7	73.6
28	663.3	71.	662.2	661.1	660.6	660.6	659.2	70.7	659.	658.4	657.5	658.4	70.5
29	658.6	73.1	658.	657.7	656.1	656.	655.	73.4	654.	653.6	653.4	652.6	73.8
30	670.2	73.5	669.2	668.8	667.	667.	664.	73.5	668.2	665.9	666.5	667.2	73.5
Means	650.4	68.4	650.1	649.2	648.5	648.4	648.6	68.4	649.	649.2	649.5	650.1	68.3
Reduced to 32° Fah.	555.7		555.4	554.6	553.9	553.9	554.1		554.5	554.7	555.1	555.7	

JUNE.]

SECOND MAXIMUM OF HORIZONTAL FORCE.

[1942.]

Göttingen time..... Observatory time.....	<i>h. m.</i> 21 02 15 21½	Therm., Fah.	<i>h. m.</i> 21 08 15 27½	<i>h. m.</i> 21 14 15 33½	<i>h. m.</i> 21 20 15 39½	<i>h. m.</i> 21 26 15 45½	<i>h. m.</i> 21 32 15 51½	Therm., Fah.	<i>h. m.</i> 21 38 15 57½	<i>h. m.</i> 21 44 16 03½	<i>h. m.</i> 21 50 16 09½	<i>h. m.</i> 21 56 16 15½
June 1.....	626.6	68.6	636.5	639.4	644.8	644.5	645.3	69.3	649.4	645.8	650.6	648.8
2.....	637.5	70.	643.	644.8	650.3	643.3	644.2	70.7	649.4	647.	645.7	646.
3.....	654.1	69.2	662.5	663.4	660.3	660.3	660.5	69.8	659.3	658.3	661.4	658.4
4.....	655.	69.1	646.5	641.7	642.2	.....	643.5	69.1	638.7	605.	595.	594.
6.....	665.1	73.5	662.5	659.7	666.2	661.8	664.9	73.9	661.8	661.6	659.	656.4
7.....	633.9	64.7	633.	630.9	630.9	627.6	624.	65.3	634.	624.	625.	626.7
8.....	616.9	64.7	623.6	626.9	624.7	628.2	633.3	64.9	633.	628.4	626.2	625.9
9.....	660.7	69.9	661.4	649.5	656.7	665.2	652.9	70.	633.9	631.2	627.2	648.3
10.....	668.2	76.	668.6	665.1	667.6	665.3	666.9	76.5	667.5	668.7	668.6	667.5
11.....	624.1	60.5	623.6	618.9	614.8	611.	611.	61.	610.	611.3	612.2	615.3
13.....	656.2	70.4	651.7	653.7	647.	647.3	648.5	71.1	650.	642.8	639.3	640.1
14.....	675.	71.	670.	673.8	669.	664.7	673.1	71.2	663.	652.4	638.8	645.
15.....	.....	74.3	656.5	658.2	652.8	658.8	655.7	74.5	658.8	658.9	665.5	662.
16.....	660.	78.2	660.9	660.9	663.2	664.3	667.8	78.5	669.5	668.	669.4	669.2
17.....	661.9	75.3	662.	658.9	657.2	658.7	659.6	75.3	660.7	658.	658.	657.9
18.....	649.4	78.7	655.6	658.	651.5	652.2	658.2	79.	662.5	658.6	653.4	659.
20.....	658.9	74.2	660.6	663.4	661.	659.2	658.2	74.7	665.8	663.4	660.6	665.7
21.....	664.7	76.1	663.4	663.4	662.6	662.3	662.2	76.9	663.	667.9	667.3	668.9
22.....	653.8	78.8	648.8	646.1	649.	658.	658.	79.5	651.	646.7	647.1	650.7
23.....	691.4	77.8	694.2	689.	687.7	684.4	678.7	77.8	673.7	663.	667.1	663.5
24.....	658.9	73.4	651.7	663.8	662.2	659.7	653.3	74.	669.3	671.8	675.5	669.3
25.....	664.8	75.5	657.2	660.6	662.	666.3	674.7	75.8	679.2	682.	680.6	678.
27.....	678.2	78.6	676.	673.5	677.6	675.8	676.3	78.7	690.2	681.	691.3	681.
28.....	666.5	76.2	668.1	663.4	668.3	669.6	670.1	76.8	671.	672.	673.5	676.
29.....	672.3	79.8	672.9	675.7	674.5	677.5	680.8	80.2	680.6	678.3	678.4	681.5
30.....	696.5	83.	689.7	680.8	682.7	683.9	699.9	84.	689.4	684.	688.	692.4
Means.....	658.4	73.4	658.1	657.2	657.6	658.8	658.9	73.8	657.8	655.	654.4	655.2
Reduced to 32° Fah....	550.9		550.3	549.2	549.4	549.9	550.3		549.	546.	545.2	545.8

[1842.]

SECOND MAXIMUM OF HORIZONTAL FORCE—Continued.

JUNE.]

Göttingen time. Observatory time.	h. m.		Therm., Fah.		h. m.		Therm., Fah.		h. m.		Therm., Fah.		h. m.		Therm., Fah.		h. m.		Therm., Fah.		h. m.		Therm., Fah.	
	22 02	16 21½	22 03	16 27½	22 14	16 33½	22 20	16 39½	22 26	16 45½	22 32	16 51½	22 38	16 57½	22 44	17 03½	22 50	17 09½	22 56	17 15½	23 02	17 21½	23 08	17 27½
June 1	648.4	70.	647.2	645.5	646.6	651.8	649.2	70.5	651.6	650.3	648.5	71.1	649.3	647.2	650.3	648.5	649.3	647.2	650.3	648.5	71.1	649.3	647.2	650.3
2	649.3	71.3	641.7	647.1	648.7	649.5	647.9	71.8	649.3	647.2	648.7	71.8	649.3	647.2	648.7	649.3	648.5	649.3	647.2	650.3	648.5	71.1	649.3	647.2
3	657.3	70.4	651.	651.1	657.3	659.	663.1	70.8	658.	653.8	649.	71.2	658.	653.8	649.	653.8	649.	653.8	649.	653.8	649.	71.2	658.	653.8
4	593.9	69.2	573.3	561.2	544.1	560.	571.4	69.	573.7	599.	611.5	613.	599.	611.5	599.	611.5	611.5	611.5	613.	613.	613.	69.	599.	611.5
5	656.	74.3	659.6	658.5	658.7	659.	658.4	74.8	661.6	660.7	658.5	75.2	661.6	660.7	660.7	658.5	658.5	658.5	659.	659.	75.2	661.6	660.7	658.5
6	626.5	65.8	627.2	629.5	632.6	635.2	634.5	66.	637.4	643.7	645.	646.6	637.4	643.7	645.	646.6	645.	646.6	646.6	646.6	66.2	646.6	643.7	645.
7	628.4	65.1	632.	632.7	632.4	632.1	635.	65.2	637.9	637.	639.	641.	637.9	637.	639.	641.	639.	639.	641.	641.	65.3	641.	637.	639.
8	658.4	71.2	668.6	679.5	680.2	659.1	654.4	71.8	653.9	656.9	650.	633.2	653.9	656.9	656.9	650.	650.	633.2	633.2	633.2	72.3	650.	633.2	656.9
9	665.	76.8	665.7	663.1	658.1	659.1	663.	77.2	657.7	654.3	658.	661.	657.7	654.3	658.	661.	658.	658.	661.	661.	77.6	658.	661.	654.3
10	619.2	61.7	621.	619.	616.5	616.2	616.4	62.2	616.7	616.	616.7	615.7	616.7	616.	616.	616.7	616.7	616.7	615.7	615.7	62.7	616.7	616.	615.7
11	644.3	71.8	643.	647.6	645.3	643.3	647.4	72.3	644.6	645.	645.3	72.8	644.6	645.	645.	645.3	645.3	644.5	644.5	644.5	72.8	644.6	645.	644.5
12	648.8	71.4	655.7	664.5	673.8	669.3	673.	71.9	669.3	662.5	662.5	72.3	669.3	662.5	662.5	662.5	662.5	662.5	662.5	662.5	72.8	669.3	662.5	662.5
13	664.3	74.5	670.2	669.7	671.3	674.5	677.1	74.4	677.6	677.7	674.9	74.3	677.6	677.7	677.7	674.9	674.9	674.9	674.5	674.5	74.3	677.6	677.7	674.9
14	671.2	78.8	672.	674.5	675.5	678.5	676.2	78.8	678.	679.	680.5	78.8	678.	679.	679.	680.5	680.5	678.2	678.2	678.2	78.8	678.	679.	680.5
15	668.	75.5	657.4	657.8	658.6	660.4	659.8	75.6	663.6	665.7	662.	75.6	663.6	665.7	665.7	662.	662.	662.	665.7	665.7	75.6	663.6	665.7	662.
16	654.	79.	660.2	664.	666.9	665.7	662.	78.9	660.7	663.2	663.2	78.9	660.7	663.2	663.2	663.2	663.2	663.2	665.7	665.7	78.9	660.7	663.2	663.2
17	665.9	75.	663.8	665.1	665.4	666.6	670.	75.	666.9	667.2	671.7	75.	666.9	667.2	667.2	671.7	671.7	667.2	667.2	667.2	75.	666.9	667.2	667.2
18	664.2	77.4	665.4	667.3	666.2	666.3	671.6	77.9	667.9	671.3	671.3	77.9	667.9	671.3	671.3	671.3	671.3	671.3	671.3	671.3	77.9	667.9	671.3	671.3
19	646.3	80.1	646.4	637.6	637.1	635.2	632.3	80.4	634.8	631.	631.	80.4	634.8	631.	631.	631.	631.	631.	631.	631.	80.4	634.8	631.	631.
20	660.4	77.8	663.1	665.	668.2	662.6	660.8	77.8	676.4	681.	680.8	77.8	676.4	681.	681.	680.8	680.8	680.8	680.8	680.8	77.8	676.4	681.	680.8
21	667.1	74.7	663.7	670.	668.4	666.8	665.8	75.2	666.6	666.4	666.4	75.2	666.6	666.4	666.4	666.4	666.4	666.4	666.4	666.4	75.2	666.6	666.4	666.4
22	677.5	76.	677.5	678.8	678.5	677.5	673.6	76.	689.1	686.4	686.2	76.	689.1	686.4	686.4	686.2	686.2	686.2	686.2	686.2	76.	689.1	686.4	686.2
23	679.1	78.5	680.2	677.5	678.5	677.5	673.6	78.	679.7	683.9	680.6	78.	679.7	683.9	683.9	680.6	680.6	680.6	680.6	680.6	78.	679.7	683.9	680.6
24	676.2	77.	676.5	677.5	678.5	679.5	678.8	77.4	679.7	683.9	680.6	77.4	679.7	683.9	683.9	680.6	680.6	680.6	680.6	680.6	77.4	679.7	683.9	680.6
25	685.8	80.7	682.	684.4	685.3	681.	681.1	81.4	683.4	685.6	685.6	81.4	683.4	685.6	685.6	685.6	685.6	685.6	685.6	685.6	81.4	683.4	685.6	685.6
26	693.8	84½	688.4	692.1	698.	702.4	703.2	84.8	704.	703.1	704.	84.8	704.	703.1	703.1	704.	704.	704.	704.	704.	84.8	704.	703.1	704.
27	656.1	74.2	656.2	657.	657.2	657.	658.4	74.4	658.	658.7	660.2	74.4	658.	658.7	658.7	660.2	660.2	659.6	659.6	659.6	74.4	658.	658.7	660.2
28	546.5		546.4	547.1	547.1	546.8	548.1		547.5	548.	549.3		547.5	548.	548.	549.3	549.3	548.6	548.6	548.6		547.5	548.	549.3
29																								
30																								
Means	656.1	74.2	656.2	657.	657.2	657.	658.4	74.4	658.	658.7	660.2	74.4	658.	658.7	658.7	660.2	660.2	659.6	659.6	659.6	74.4	658.	658.7	660.2
Reduced to 32° Fah.	546.5		546.4	547.1	547.1	546.8	548.1		547.5	548.	549.3		547.5	548.	548.	549.3	549.3	548.6	548.6	548.6		547.5	548.	549.3

June.]

FIRST MINIMUM OF HORIZONTAL FORCE.

[1842.]

	<i>h. m.</i> 1 02 19 21½	Therm., Fah.	<i>h. m.</i> 1 08 19 27½	<i>h. m.</i> 1 14 19 33½	<i>h. m.</i> 1 20 19 39½	<i>h. m.</i> 1 26 19 45½	<i>h. m.</i> 1 32 19 51½	Therm., Fah.	<i>h. m.</i> 1 38 19 57½	<i>h. m.</i> 1 44 20 03½	<i>h. m.</i> 1 50 20 09½	<i>h. m.</i> 1 56 20 15½
Göttingen time.....												
Observatory time.....												
June 1.....	..... 642.9	72.7	641.3	643.3	643.1	639.2	640.3	72.1	641.4	643.3	647.	650.4
2.....	648.6	71.6	645.5	647.4	647.7	645.4	643.	71.3	641.9	638.5	644.6	647.3
3.....	655.8	71.2	648.6	650.7	651.5	651.3	650.6	70.8	650.4	650.6	651.	650.5
4.....	655.8	69.5	684.	693.6	700.6	710.2	729.	69.5	723.4	728.3	725.1	717.4
5.....	655.5	74.8	683.8	680.	670.5	664.5	662.3	74.4	668.2	676.9	668.6	673.7
6.....	652.	66.	652.	650.6	646.2	646.	643.7	65.6	644.2	645.8	647.2	646.
7.....	644.5	65.	643.8	643.2	642.5	641.6	643.9	65.	648.4	645.	648.7	651.
8.....	679.3	73.7	660.9	658.	661.	667.5	672.	73.6	678.6	683.3	681.	682.4
9.....	678.8	77.7	677.5	678.4	679.	679.	679.1	77.	678.	675.2	675.9	675.5
10.....	628.1	64.	629.4	630.7	637.2	635.2	636.7	64.	635.9	633.5	629.2	631.5
11.....	706.4	72.8	712.6	710.7	712.7	715.1	713.6	72.5	706.2	699.2	699.2	693.3
12.....	673.3	71.8	673.1	670.5	667.	664.1	666.8	71.8	666.1	665.	663.8	663.7
13.....	676.	73.5	676.	669.5	671.2	672.	671.7	73.5	670.6	667.4	664.6	663.
14.....	684.2	78.5	684.3	684.	685.5	686.6	686.2	78.2	685.	685.	685.1	686.5
15.....	665.3	75.6	665.9	665.8	667.2	668.	666.7	75.5	668.4	669.7	668.5	667.1
16.....	681.2	78.8	678.9	680.3	678.9	678.4	674.	78.5	677.4	677.1	679.	681.3
17.....	.....	75.	685.7	685.	685.	685.8	684.9	75.	684.2	684.2	684.2	684.2
18.....	.....	77.8	671.	671.2	672.8	675.5	673.4	77.4	673.4	674.2	677.1	675.2
19.....	625.4	81.4	646.7	651.9	665.4	664.7	661.	81.	665.4	653.2	654.	650.5
20.....	676.9	75.9	678.2	677.7	679.1	677.2	674.7	75.3	674.1	675.	674.9	675.3
21.....	689.	76.	684.1	690.1	688.5	682.	685.5	75.5	687.1	690.	682.7	680.7
22.....	674.4	75.5	673.2	678.5	682.	680.2	674.3	75.	661.4	657.1	655.9	666.5
23.....	678.6	76.9	682.1	682.2	674.7	677.8	680.1	76.7	680.6	680.9	680.5	679.4
24.....	683.4	78.8	684.7	684.	682.4	683.	684.1	78.6	682.7	683.	685.7	685.
25.....	689.6	82.1	687.	687.8	690.	689.9	690.6	82.	692.8	692.8	692.4	689.7
26.....	701.7	83.5	703.	700.5	700.	697.8	695.7	83.	696.	696.	685.8	687.
Means.....	670.4	74.6	671.2	671.8	672.4	672.2	672.4	74.3	672.4	671.6	671.2	671.3
Reduced to 32° Fah....	560.		560.5	561.3	562.	562.	562.3		562.5	561.9	561.7	562.

June.]

FIRST MINIMUM OF HORIZONTAL FORCE—Continued.

[1842.]

[97]

704

Göttingen time..... Observatory time	<i>h. m.</i> 2 02 20 21½	Therm., Fah.	<i>h. m.</i> 2 09 20 27½	<i>h. m.</i> 2 14 20 33½	<i>h. m.</i> 2 20 20 39½	<i>h. m.</i> 2 26 20 45½	<i>h. m.</i> 2 32 20 51½	Therm., Fah.	<i>h. m.</i> 2 38 20 57½	<i>h. m.</i> 2 44 21 03½	<i>h. m.</i> 2 50 21 09½	<i>h. m.</i> 2 56 21 15½	Therm., Fah.
June 1.....	645.5	71.5	650.2	650.3	645.5	641.9	634.	71.2	628.7	632.4	633.5	629.5	71.
2.....	649.2	70.7	654.7	653.8	654.2	658.6	652.	70.5	637.6	636.1	633.	638.	70.3
3.....	649.5	70.5	647.1	645.7	645.6	645.9	645.2	70.1	644.5	644.8	645.3	645.2	69.8
4.....	715.8	69.5	738.8	740.2	708.9	677.1	634.5	69.5	601.7	640.2	712.5	717.7	69.5
6.....	678.1	74.	682.8	684.8	685.7	687.2	688.8	73.4	695.	696.8	694.9	694.9	73.
7.....	644.7	65.2	645.	644.7	642.7	643.2	641.6	64.8	642.	.....	643.	642.7	64.4
8.....	652.3	66.	653.3	649.	645.3	645.8	648.2	66.	654.5	651.7	650.9	649.8	65.
9.....	654.7	73.5	639.2	679.5	677.1	677.7	674.5	73.4	671.9	664.8	660.9	649.8	73.3
10.....	671.1	76.3	675.	675.8	675.6	677.	678.2	75.6	678.6	678.2	676.3	677.9	75.
11.....	625.4	63.3	629.3	627.5	631.5	613.9	609.9	62.7	614.	615.3	618.9	621.9	62.
13.....	686.6	72.3	689.3	686.4	682.6	680.2	678.6	72.1	675.7	672.5	674.5	674.5	71.9
14.....	683.7	71.8	680.4	656.7	658.5	662.5	671.5	71.8	683.7	687.6	685.6	682.8	71.8
15.....	663.7	73.	664.3	671.1	671.1	665.1	666.4	73.	667.1	668.	667.6	666.	73.
16.....	685.3	78.1	685.8	686.1	686.6	686.6	685.8	78.	685.8	686.1	686.	685.7	78.
17.....	666.6	75.4	667.5	668.2	668.9	668.	668.8	75.3	667.2	667.3	667.9	667.	75.2
18.....	680.	78.1	680.2	681.	682.2	681.8	682.	77.8	681.1	681.9	681.4	682.9	77.8
20.....	686.	75.	685.4	685.2	684.1	683.6	683.5	75.	682.4	681.9	680.8	681.	75.
21.....	676.6	76.8	676.6	674.7	675.	676.8	670.6	76.3	672.1	671.9	671.6	675.4	75.8
22.....	654.3	80.2	664.2	674.7	682.7	676.2	672.9	79.7	684.1	673.2	664.7	664.2	79.1
23.....	672.6	75.6	671.3	671.1	670.	666.2	662.3	74.7	666.8	666.6	673.6	675.5	74.4
24.....	678.5	74.7	676.1	669.	670.	666.5	669.5	74.	680.5	689.8	689.8	687.8	73.4
25.....	662.8	74.8	660.8	663.3	666.3	671.1	674.7	74.6	677.8	676.8	673.4	674.	74.4
27.....	679.2	76.5	681.3	681.4	678.7	686.7	678.	76.3	678.9	678.0	678.5	680.4	76.1
28.....	683.8	78.4	683.	683.	682.9	685.3	686.1	78.2	686.6	687.6	686.3	685.5	78.
29.....	698.5	82.	687.7	687.2	685.8	685.6	686.3	82.	685.2	686.5	681.1	676.5	82.
30.....	698.5	82.8	693.7	686.9	688.1	685.4	685.9	82.6	686.7	694.	699.7	688.5	82.4
Means.....	671.	74.	672.8	672.2	670.7	669.1	666.6	73.7	666.6	669.1	670.5	669.8	73.6
Reduced to 32° Fah.....	561.8		563.7	563.3	562.	560.5	558.1		558.3	559.9	562.5	561.9	

June.]

SECOND MINIMUM OF HORIZONTAL FORCE.

[1842.]

Göttingen time..... Observatory time.....	h. m. 15 32 9 51½	Therm., Fah.	h. m. 15 38 9 57½	h. m. 15 44 10 03½	h. m. 15 50 10 08½	h. m. 15 56 10 13½	h. m. 16 02 10 18½	Therm., Fah.	h. m. 16 08 10 27½	h. m. 16 14 10 33½	h. m. 16 20 10 39½	h. m. 16 26 10 45½
89 June 1.....	630.5	63.4.	630.9	631.7	633.5	634.	636.	63.8	638.4	637.1	637.1	636.1
2.....	637.1	64.4.	636.6	630.	627.5	625.8	623.4	64.7	631.5	621.1	621.1	624.2
3.....	672.4	63.5	673.	673.3	673.7	671.2	671.7	64.	670.5	671.7	671.2	666.
4.....	.....	64.7	657.5	657.3	646.6	650.5	646.5	65.	644.	641.7	655.	647.8
6.....	701.2	70.3	699.1	703.4	706.	708.	705.5	70.5	705.6	705.9	705.1	706.4
7.....	660.2	61.4	653.4	657.	656.5	659.2	660.2	61.5	659.2	655.9	656.	661.9
8.....	640.6	58.5	639.2	638.7	638.7	638.	639.5	59.	639.	640.4	640.5	642.1
9.....	634.6	64.3	635.8	.....	640.1	642.7	648.4	64.6	647.3	645.7	647.3	645.3
10.....	656.2	71.3	659.5	665.	673.7	664.	676.3	71.5	677.5	673.4	673.2	672.8
11.....	655.	59.2	656.	655.8	656.7	658.1	658.3	59.	657.9	658.5	656.6	656.1
13.....	643.1	63.5	644.2	649.1	648.6	643.4	647.7	63.9	641.3	632.3	635.	638.6
14.....	681.5	68.4	683.7	683.9	686.6	698.3	688.7	68.7	691.	675.4	678.6	681.9
15.....	665.9	70.2	663.5	665.2	667.8	673.2	668.	70.7	670.7	672.3	672.4	671.9
16.....	678.5	73.	680.2	681.1	681.	679.4	681.	73.5	680.1	680.	679.6	680.
17.....	689.	74.5	688.6	686.7	686.1	684.	681.4	74.5	680.7	682.5	684.	685.
18.....	671.	74.4	672.1	672.	674.7	675.6	677.	74.6	678.6	678.7	679.7	681.9
20.....	684.4	72.9	684.7	686.1	686.3	687.6	689.2	73.	688.9	689.8	690.2	690.
21.....	688.1	72.	688.9	689.	689.7	690.2	688.2	72.2	688.	686.4	686.1	683.9
22.....	690.2	73.2	690.9	691.9	691.6	693.7	696.9	73.7	700.	695.5	691.8	690.6
23.....	684.3	76.2	684.	686.	687.	684.5	686.1	76.3	684.6	686.	686.6	685.6
24.....	684.2	69.	690.4	691.9	690.1	687.7	695.6	69.1	701.2	694.4	696.4	690.2
25.....	668.1	71.6	667.5	669.5	673.	680.8	676.1	72.	677.4	670.1	671.5	673.1
27.....	686.5	75.	683.7	689.7	686.9	688.3	688.1	75.3	690.7	691.	689.2	691.8
28.....	679.6	70.8	680.	680.9	680.2	680.8	681.7	71.	681.8	684.4	686.	687.6
29.....	692.	75.5	692.5	693.2	693.2	692.2	692.1	75.9	691.	690.8	690.2	689.3
30.....	710.6	76.5	711.8	713.3	718.5	716.4	714.7	77.1	714.4	714.	714.	715.2
Means.....	671.4	69.1	671.6	673.3	673.2	673.4	673.9	69.4	673.5	672.1	673.	673.
Reduced to 32° Fah.....	574.9		574.9	576.6	576.2	576.3	576.5		576.	574.4	575.1	574.9

[1943.

SECOND MINIMUM OF HORIZONTAL FORCE—Continued.

JUNE.]

Göttingen time. Observatory time	h. m. 16 32 10 51½	Therm., Fah. 10 57½	h. m. 16 38 10 57½	h. m. 16 44 11 03½	h. m. 16 50 11 09½	h. m. 16 56 11 15½	h. m. 17 02 11 21½	Therm., Fah. 11 27½	h. m. 17 08 11 27½	h. m. 17 14 11 33½	h. m. 17 20 11 39½	h. m. 17 26 11 45½	Therm., Fah. 11 45½
June 1.....	637.	64.1	639.7	640.	639.5	639.8	641.3	64.5	641.	641.	641.3	644.2	64.9
2.....	625.3	65.2	626.3	629.3	629.4	629.7	629.8	65.7	631.	634.8	632.9	630.9	65.1
3.....	665.4	64.6	664.5	665.	664.	661.1	658.9	65.2	658.5	657.8	657.6	658.7	65.5
4.....	642.4	65.3	631.2	626.7	635.1	629.8	630.	65.6	628.8	626.2	626.1	623.1	65.8
6.....	707.	70.9	705.2	704.3	700.2	699.	699.1	71.2	699.	697.	695.5	693.8	71.5
7.....	668.	61.6	663.1	663.8	661.	654.6	653.7	61.7	652.6	652.1	652.2	654.	61.8
8.....	641.	59.5	642.8	647.3	640.5	640.5	641.8	60.1	640.5	637.8	635.5	635.5	60.5
9.....	645.1	65.	646.6	648.2	647.8	648.1	649.4	65.3	651.7	654.	652.3	652.3	65.6
10.....	667.1	72.	665.4	666.6	673.1	680.8	674.8	72.4	674.7	682.5	684.	677.6	72.6
11.....	657.5	68.9	657.5	656.5	655.	657.5	657.3	68.9	658.1	657.2	656.7	657.6	68.9
13.....	637.6	64.5	635.5	631.4	632.	638.9	637.	65.2	643.	639.4	639.7	633.3	65.7
14.....	682.6	68.9	691.9	698.	702.	706.6	700.	69.1	704.6	703.	703.	699.	69.2
15.....	673.5	71.3	674.5	672.	670.6	670.	671.	71.7	670.8	671.	670.	673.	72.1
16.....	682.7	74.2	684.4	684.1	683.2	680.7	680.7	74.7	678.7	678.5	679.7	677.7	75.1
17.....	685.2	74.7	684.4	684.7	683.2	682.7	683.	74.8	683.9	679.1	679.	679.	75.
18.....	689.	73.	689.	681.1	681.8	681.1	681.4	75.1	683.4	681.7	681.2	680.8	75.7
20.....	684.5	72.4	687.8	684.5	683.7	680.4	677.4	73.8	679.8	678.7	679.	677.8	73.
21.....	690.9	74.2	692.1	690.8	686.2	687.4	686.8	74.6	697.7	697.3	690.5	691.	75.
22.....	685.	76.5	686.	687.2	686.6	685.6	686.	76.7	681.4	683.5	683.8	682.7	77.
23.....	690.2	69.5	692.2	693.5	689.3	681.5	686.7	69.9	689.6	688.	686.7	682.5	70.2
24.....	670.2	72.5	668.3	674.4	671.6	672.	674.4	73.9	678.2	676.6	678.9	678.9	73.2
25.....	691.6	75.9	693.9	696.9	699.	698.2	693.2	76.5	695.9	697.5	694.	686.9	76.8
27.....	688.	71.4	688.8	690.9	693.4	691.	692.	71.8	692.2	693.	692.6	694.	72.2
28.....	698.	76.3	696.3	695.1	695.1	695.1	694.1	76.6	693.6	684.8	694.9	685.2	77.
29.....	713.9	78.	713.1	710.5	710.5	710.1	708.5	78.7	704.4	701.9	701.6	702.7	79.3
Means.....	673.8	69.8	672.8	673.5	673.	672.6	673.	70.2	672.6	672.6	671.1	670.5	70.5
Reduced to 32° Fah.....	574.5		574.3	574.9	574.2	573.6	573.		573.3	573.1	571.4	570.6	

MAGNETIC OBSERVATORY,

AT THE

GIRARD COLLEGE, PHILADELPHIA.

EXTRAORDINARY MAGNETIC OBSERVATIONS.

MAXIMA AND MINIMA,

FROM JULY TO DECEMBER, 1842.

GENERAL NOTE.

The observations are the same as in January, 1842.

[1942.]

FIRST MAXIMUM OF DECLINATION.

Jury.]

	<i>h. m.</i> 6 00 0 19½	<i>h. m.</i> 6 06 0 26½	<i>h. m.</i> 6 12 0 31½	<i>h. m.</i> 6 18 0 37½	<i>h. m.</i> 6 24 0 43½	<i>h. m.</i> 6 30 0 49½	<i>h. m.</i> 6 36 0 55½	<i>h. m.</i> 6 42 1 01½	<i>h. m.</i> 6 48 1 07½	<i>h. m.</i> 6 54 1 13½
Göttingen time.....										
Observatory time										
July 1	576.1	578.3	584.9	589.	591.8	594.3	591.6	598.8	599.3	591.2
2	597.8	595.8	591.3	589.	576.9	572.7	564.5	552.6	543.2	565.9
4	608.2	596.8	597.7	596.1	587.5	613.9	607.7	582.	570.5	576.3
5	595.7	596.1	595.1	592.3	590.9	569.8	569.8	560.	559.4	580.2
6	570.8	597.2	596.8	593.4	588.	568.	568.1	567.9	568.	564.1
7	595.1	594.1	592.6	591.9	591.8	592.	593.3	591.3	591.6	560.4
8	593.7	593.5	593.7	593.6	593.9	594.1	594.1	594.2	594.3	584.2
9	590.3	593.	593.8	592.4	578.2	577.6	591.	600.2	595.9	594.3
11	593.9	593.6	593.4	593.3	593.7	593.1	593.	593.3	593.1	593.4
12	595.1	595.9	596.4	596.3	597.9	598.2	597.9	597.2	597.	596.6
13	594.7	595.	594.9	594.9	593.9	593.8	593.5	593.1	593.	593.
14	595.3	595.	595.5	596.4	596.4	596.8	596.8	596.6	596.8	597.3
15	590.5	591.1	596.9	571.	573.	571.8	572.5	571.6	574.3	574.8
16	572.	570.8	599.6	598.6	570.	595.9	597.6	598.	598.	597.9
18	596.9	595.3	597.2	598.7	599.4	599.5	598.8	598.2	598.	597.9
19	593.3	592.	598.5	599.7	597.7	598.	598.1	591.2	595.1	598.1
20 .....	.....	.....	.....	599.7	596.9	598.3	570.	570.4	572.6	572.
21	591.1	590.6	590.6	590.5	591.	592.6	591.9	592.	591.5	591.4
22	593.3	593.5	594.	593.3	594.	594.1	594.3	594.8	594.4	594.1
23	596.9	598.8	571.4	572.6	570.1	570.9	593.	596.	591.8	592.9
25	596.9	597.3	597.7	597.8	597.5	599.	599.5	598.1	598.6	598.1
26	597.3	598.1	597.6	596.5	596.7	595.6	596.9	596.7	596.5	596.3
27	594.5	595.4	594.	594.2	594.4	594.6	595.3	594.8	594.8	594.6
28	597.	597.	597.5	597.2	596.9	597.7	597.2	596.4	596.5	596.2
29	599.5	571.7	572.	572.2	572.4	599.2	596.	595.	595.2	570.
30	571.	571.2	570.3	572.1	574.	576.3	575.7	578.	572.3	570.5
Means	599.9	599.4	598.8	598.6	597.9	598.7	598.6	597.1	596.1	597.4

[1842.

FIRST MAXIMUM OF DECLINATION—Continued.

JULY.]

	<i>h. m.</i> 7 00 1 19½	<i>h. m.</i> 7 06 1 25½	<i>h. m.</i> 7 12 1 31½	<i>h. m.</i> 7 18 1 37½	<i>h. m.</i> 7 24 1 43½	<i>h. m.</i> 7 30 1 49½	<i>h. m.</i> 7 36 1 55½	<i>h. m.</i> 7 42 2 01½	<i>h. m.</i> 7 48 2 07½	<i>h. m.</i> 7 54 2 13½
Göttingen time.....										
Observatory time.....										
July 1.....	561.7	564.3	567.1	568.9	571.	571.1	570.5	570.5	571.	569.
2.....	575.2	572.	575.4	582.4	575.	581.6	552.8	545.3	550.3	558.3
4.....	574.6	548.4	547.2	518.6	507.2	496.5	488.1	516.4	543.6	564.5
5.....	560.7	560.7	560.7	560.	559.2	558.8	559.1	558.	557.4	556.6
6.....	564.5	568.7	562.7	562.3	560.5	555.6	554.5	544.6	535.7	534.6
7.....	567.4	564.9	563.6	550.	549.1	551.9	556.9	552.5	566.6	569.5
8.....	564.2	564.3	564.1	564.6	564.6	564.9	564.6	565.	564.4	565.
9.....	563.3	563.5	562.5	567.9	564.	560.2	575.6	572.	572.5	572.9
11.....	563.3	564.3	564.4	563.7	563.3	560.6	567.2	554.3	552.7	553.2
12.....	567.4	566.7	567.1	567.4	566.1	560.	559.1	560.	560.2	558.9
13.....	.....	563.4	563.5	563.9	563.1	564.1	563.9	563.7	563.8	563.7
14.....	566.	565.2	567.	566.7	566.7	565.3	564.7	565.1	564.6	564.8
15.....	573.6	574.	574.4	574.	573.4	572.9	568.3	568.5	568.	568.
16.....	568.1	568.1	568.1	568.	567.3	567.4	567.4	567.5	567.5	566.7
18.....	568.8	568.8	568.5	568.5	566.2	564.6	565.1	566.2	565.6	566.5
19.....	570.4	570.7	571.7	572.6	571.8	572.6	571.1	571.9	570.7	567.8
20.....	571.5	567.	566.5	566.2	565.5	568.2	569.	567.5	566.7	565.5
21.....	561.5	563.8	564.3	564.9	564.7	566.	566.	566.5	564.5	564.2
22.....	564.	564.	564.2	564.1	563.2	562.9	563.9	563.8	564.7	565.6
23.....	561.3	564.9	561.5	561.2	560.4	560.2	564.6	566.9	573.6	577.9
25.....	567.2	567.8	567.4	568.1	566.4	566.1	565.7	565.5	564.1	564.2
26.....	566.4	566.5	567.	566.8	567.2	566.7	568.	569.3	568.1	566.9
27.....	563.8	565.5	564.1	562.	562.1	561.4	561.	562.7	562.	561.9
28.....	566.5	567.5	568.	568.	568.	.....	568.9	568.5	568.7	568.7
29.....	570.	570.	568.7	.....	.....	.....	.....	670.	569.9	569.9
30.....	569.2	568.4	568.7	568.1	.....	.....	568.1	568.	568.	568.
Means.....	567.5	566.4	566.3	565.1	563.6	561.7	561.4	562.3	563.3	564.3

July.]

SECOND MAXIMUM OF DECLINATION.

[1843.]

Göttingen time. Observatory time	h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.	
	18 00	12 19½	18 06	12 25½	18 12	12 31½	18 18	12 37½	18 24	12 43½	18 30	12 49½	18 36	12 55½	18 42	13 01½	18 48	13 07½	18 54	13 13½
July 1	552.8		554.7		554.7		557.1		557.4		558.7		558.3		559.3		542.5		539.3	
2	545.		538.2		540.7		541.		541.		546.1		546.3		546.8		552.1		551.	
4	568.		568.5		571.		561.5		563.3		569.5		566.5		563.7		565.7		565.7	
5	559.4		559.		559.7		558.6		558.3		558.		557.5		557.2		557.		556.3	
6	553.9		555.8		554.2		553.1		552.2		551.9		552.3		552.		552.1		552.6	
7	556.2		556.2		556.5		556.		554.5		554.5		554.9		552.2		552.1		552.1	
8	557.5		556.4		555.2		555.6		556.1		555.4		555.3		554.7		554.4		554.	
9	558.2		557.5		557.5		557.		557.8		558.9		558.		559.4		559.3		559.7	
11	551.6		552.8		555.2		555.		555.7		554.5		554.5		554.9		554.6		553.9	
12	559.5		559.		558.5		556.9		556.		554.8		553.7		553.		552.8		552.7	
13	558.6		558.6		558.		557.4		557.		557.1		557.		556.2		556.		556.2	
14	555.2		554.6		554.2		553.5		553.		552.3		552.		551.4		551.		551.	
15	556.1		556.1		555.9		555.		554.5		553.7		553.1		553.		553.		552.9	
16	556.		556.5		556.		556.7		556.3		556.1		556.6		556.3		556.6		556.8	
18	554.4		554.1		554.		553.8		554.3		553.7		553.5		553.5		553.3		553.8	
19	554.		555.2		555.4		555.2		554.8		557.		555.7		555.5		554.4		555.4	
20	557.4		557.5		557.3		558.		558.		557.1		556.9		557.		556.5		556.7	
21	557.8		557.4		557.6		557.4		557.		556.8		556.		555.8		556.3		556.2	
22	547.6		547.5		547.6		547.3		548.5		548.9		549.4		550.		549.2		548.6	
23	556.8		556.5		556.2		555.6		554.6		553.8		554.4		556.4		556.6		557.7	
25	557.4		557.		556.9		556.4		556.		555.9		556.1		554.7		554.3		554.2	
26	551.8		550.9		549.8		549.		548.6		547.9		547.2		547.		546.8		546.5	
27	554.3		553.3		553.1		552.4		552.		551.6		551.4		551.4		551.		551.	
28	559.5		559.		558.5		558.		557.5		557.		556.7		556.3		556.		555.9	
29	559.5		559.		559.4		558.5		558.		556.4		556.1		555.		554.6		553.9	
30	564.6		565.2		563.1		562.9		561.5		561.9		561.9		561.7		561.5		562.	
Means	556.2		556.		556.		556.7		556.1		554.9		554.9		554.3		554.1		553.9	

[1942.]

FIRST MINIMUM OF DECLINATION.

JULY.]

	<i>h. m.</i> 2 00 20 19½	<i>h. m.</i> 2 06 20 25½	<i>h. m.</i> 2 12 20 31½	<i>h. m.</i> 2 18 20 37½	<i>h. m.</i> 2 24 20 43½	<i>h. m.</i> 2 30 20 49½	<i>h. m.</i> 2 36 20 55½	<i>h. m.</i> 2 42 21 01½	<i>h. m.</i> 2 48 21 07½	<i>h. m.</i> 2 54 21 13½
Göttingen time.....										
Observatory time.....										
July 1.....	575.4	580.5	588.1	598.3	598.6	594.4	598.9	594.6	566.4	567.
2.....	571.5	570.6	567.5	563.9	563.9	561.	563.	563.4	577.1	570.7
4.....	564.5	565.	564.2	564.	566.6	566.9	568.2	568.	565.8	570.
5.....	568.1	560.5	560.1	560.	559.7	560.6	560.6	560.	567.5	566.5
6.....	563.	563.1	562.	562.5	561.5	562.2	561.8	561.6	560.7	560.7
7.....	593.2	575.1	568.5	568.5	565.1	569.7	575.7	561.3	562.7	562.4
8.....	593.4	579.6	581.5	580.6	582.5	577.9	574.4	573.7	578.9	574.9
9.....	573.2	564.	566.1	563.5	567.4	578.2	579.3	579.4	578.	576.2
10.....	565.6	562.1	562.	562.	567.4	570.6	569.2	570.9	570.6	566.9
11.....	564.2	564.1	564.6	564.	561.9	561.1	562.4	562.5	562.7	561.9
12.....	562.1	562.7	562.2	562.7	564.2	564.2	564.2	564.2	564.6	565.5
13.....	563.	563.1	564.	564.4	565.	562.	562.	562.8	562.9	563.
14.....	564.1	564.3	565.	565.	566.8	566.	566.6	567.	567.1	569.
15.....	561.8	562.	561.4	565.	562.8	562.8	568.6	568.6	568.6	569.1
16.....	567.1	565.1	565.1	566.6	567.2	566.2	562.7	566.	570.	571.
17.....	564.	564.	564.	563.6	563.	563.3	564.	564.2	564.1	566.6
18.....	562.	562.2	562.	563.8	563.2	563.1	562.9	561.4	562.5	561.9
19.....	576.6	573.1	578.4	577.8	581.7	579.	576.	571.3	568.	567.
20.....	563.3	563.6	565.7	564.4	564.6	562.9	563.6	564.2	566.	567.6
21.....	562.7	563.3	563.3	563.1	564.7	566.3	565.7	565.5	567.8	569.6
22.....	563.6	565.	565.	565.2	564.7	564.2	564.5	564.	565.4	565.7
23.....	563.8	563.8	563.2	562.5	564.	563.3	564.4	565.	564.7	565.3
24.....	566.5	569.8	560.	576.2	573.7	569.5	566.	567.	569.	569.
25.....	575.1	570.1	569.1	569.1	569.	569.3	567.9	566.	565.	565.2
Means.....	568.4	568.	568.3	567.4	567.6	567.3	567.6	567.6	567.6	567.4

July.]

FIRST MINIMUM OF DECLINATION—Continued.

[1842.

Göttingen time.....	A. m. 3 00	A. m. 3 06	A. m. 3 12	A. m. 3 18	A. m. 3 24	A. m. 3 30	A. m. 3 36	A. m. 3 42	A. m. 3 48	A. m. 3 54
Observatory time.....	21 19½	21 26½	21 31½	21 37½	21 43½	21 49½	21 55½	22 01½	22 07½	22 13½
20 July										
1.....	565.3	566.1	567.	568.1	568.9	569.	569.9	570.	570.7	571.4
2.....	566.7	572.	571.9	573.3	575.8	578.	579.5	580.7	582.2	584.6
3.....	571.3	569.8	570.	570.4	571.	573.5	573.8	574.2	574.6	575.2
4.....	567.4	570.3	571.5	572.3	572.3	571.5	574.3	575.3	574.6	572.2
5.....	562.6	561.	562.2	562.5	563.1	563.1	562.4	561.4	561.	562.3
6.....	563.	562.3	562.5	561.9	562.4	562.2	562.6	562.4	561.9	563.
7.....	571.1	570.	571.	573.	573.6	572.9	574.5	586.	595.7	593.4
8.....	574.3	574.	575.	577.2	577.2	576.7	578.	578.4	575.2	572.6
9.....	574.9	572.8	570.	568.4	566.7	565.3	565.1	564.5	564.5	565.1
10.....	566.5	567.5	568.2	565.9	565.9	567.2	568.	568.1	567.5	568.1
11.....	560.2	561.5	565.	565.9	565.0	566.	565.9	565.4	567.2	563.3
12.....	565.1	564.4	564.5	563.6	564.4	563.	563.3	565.5	567.2	568.3
13.....	563.	562.9	562.8	563.3	563.1	564.	564.1	564.6	564.9	566.
14.....	568.	567.9	566.9	566.	566.	566.1	566.2	566.1	566.	566.1
15.....	568.8	569.	569.8	569.3	572.1	575.3	578.3	579.3	578.4	578.
16.....	573.	571.	568.	571.2	573.	572.	571.5	566.7	569.8	573.
17.....	566.	564.2	564.5	563.8	563.9	563.3	563.5	563.9	563.	563.5
18.....	564.1	564.7	563.7	563.2	563.3	563.3	564.4	563.7	563.8	564.3
19.....	562.2	563.2	563.4	565.5	565.7	571.5	573.2	572.1	567.3	565.5
20.....	566.9	571.5	570.	569.8	572.1	574.1	573.	571.4	571.2	570.2
21.....	565.6	563.6	564.5	566.	565.9	565.4	565.8	566.	567.3	567.7
22.....	571.2	571.7	572.3	572.9	573.	572.5	571.2	569.5	568.4	568.4
23.....	565.6	565.5	564.9	565.	565.5	565.5	565.3	565.7	566.	566.
24.....	566.	568.	568.	568.	568.	566.2	566.	566.	566.1	567.
25.....	566.1	566.	566.	565.9	565.	564.7	564.1	565.5	566.9	568.
Means.....	566.9	567.3	567.3	567.5	568.	568.2	568.2	568.6	568.8	568.8

JULY.]

SECOND MINIMUM OF DECLINATION.

[97]

714

	h. m. 13 00 7 19½	h. m. 13 06 7 25½	h. m. 13 12 7 31½	h. m. 13 18 7 37½	h. m. 13 24 7 43½	h. m. 13 30 7 49½	h. m. 13 36 7 55½	h. m. 13 42 8 01½	h. m. 13 48 8 07½	h. m. 13 54 8 13½
Göttingen time.....										
Observatory time.....										
July 1.....	577.	579.	577.	576.7	576.2	575.5	577.	576.3	576.8	576.8
2.....	585.2	576.5	576.5	582.7	587.6	588.9	587.	592.7	596.5	595.6
4.....	568.	568.5	571.	561.5	563.2	559.5	566.5	563.7	563.	565.7
5.....	577.2	577.7	576.7	576.6	577.3	576.2	575.6	575.2	576.8	576.1
6.....	572.7	572.9	574.6	572.8	572.7	571.7	573.8	572.1	572.2	572.2
7.....	575.	574.1	575.1	573.6	573.5	572.9	573.5	574.	572.7	572.4
8.....	576.	575.9	576.	576.5	576.5	577.	578.	578.4	578.	577.
9.....	.....	.....	561.4	562.	563.2	562.9	564.7	563.9	565.5	564.7
11.....	571.9	572.9	573.5	573.4	572.1	572.3	573.1	574.3	574.9	575.
12.....	574.5	575.	575.4	576.1	576.4	576.	577.	576.7	576.9	575.5
13.....	574.	574.	574.	573.6	573.6	574.3	574.	574.3	574.6	574.8
14.....	571.6	572.1	572.5	572.5	572.9	573.4	573.5	573.8	573.6	574.1
15.....	577.	576.7	576.7	577.2	577.5	577.4	577.8	577.7	577.7	576.2
16.....	572.	572.9	573.	572.7	571.8	572.	573.	573.1	573.2	573.5
18.....	574.	577.	577.4	577.2	577.3	577.7	577.4	577.3	576.5	575.9
19.....	576.9	575.1	574.	573.1	572.	571.5	571.3	571.1	570.8	569.3
20.....	572.2	572.2	572.5	572.8	571.2	574.7	573.	572.7	572.	573.1
21.....	576.6	578.6	576.4	575.4	575.	575.	575.	575.7	577.	575.9
22.....	578.1	579.8	579.8	580.3	580.1	580.3	579.1	578.5	577.8	577.6
23.....	573.9	574.4	575.8	577.6	578.7	575.9	574.3	573.7	572.8	575.2
24.....	576.4	577.1	576.7	579.4	580.6	578.6	579.7	581.2	581.8	582.4
26.....	581.8	582.4	582.9	583.4	583.4	583.4	583.2	582.4	580.2	582.3
27.....	584.3	584.8	583.2	581.8	581.9	581.9	582.2	581.5	583.4	582.4
28.....	578.	578.2	579.1	580.6	581.2	581.7	576.9	577.	578.1	578.9
29.....	586.8	586.7	587.8	587.8	587.4	583.4	586.4	587.	590.5	589.7
30.....	580.9	581.5	582.3	580.5	580.5	581.	579.2	580.4	580.	579.5
Means.....	576.7	576.6	576.2	576.	576.3	576.	576.2	576.5	576.6	577.

[1842

MAXIMUM OF VERTICAL FORCE.

JULY.]

	<i>h. m.</i> 22 04 16 23½	Therm., Fah.	<i>h. m.</i> 22 10 16 29½	<i>h. m.</i> 22 16 16 35½	<i>h. m.</i> 22 22 16 41½	<i>h. m.</i> 22 28 16 47½	<i>h. m.</i> 22 34 16 53½	Therm., Fah.	<i>h. m.</i> 22 40 16 59½	<i>h. m.</i> 22 46 17 05½	<i>h. m.</i> 22 52 17 11½	<i>h. m.</i> 22 58 17 17½
Göttingen time.....												
Observatory time.....												
July 1.....	929.9	89.1	930.	931.4	932.2	935.5	938.	89.2	935.9	936.2	937.2	938.
2.....	814.	83.2	815.4	805.	799.7	820.5	828.9	82.8	828.2	826.7	825.7	826.4
4.....	815.1	81.9	817.3	819.3	821.	823.	824.	82.	825.3	826.2	827.6	828.4
5.....	822.	81.2	822.3	823.	823.9	824.3	825.	81.5	826.	827.6	827.5	828.2
6.....	770.4	76.6	771.	770.	770.	770.	769.	76.8	769.	769.6	769.5	770.
7.....	*748.8	77.	750.	751.2	752.6	754.1	756.	77.	756.5	757.5	758.7	759.4
8.....	756.	78.	757.	756.2	759.5	760.9	762.	78.2	763.5	765.1	766.6	767.8
9.....	791.	78.5	790.	790.	791.	791.7	791.7	78.3	791.4	790.7	789.1	788.9
11.....	769.2	77.2	764.	765.	765.2	766.	766.	77.2	767.4	768.	768.4	769.
12.....	755.	78.	756.8	758.1	760.	761.2	763.4	78.7	763.7	765.	766.5	768.
13.....	820.9	81.8	822.	822.6	823.	824.	825.	82.4	826.2	828.	829.	830.3
14.....	872.	83.5	872.	872.5	872.7	873.7	872.2	83.1	872.1	872.3	872.2	872.
15.....	715.	72.	715.	715.	715.	714.9	714.9	71.8	715.	714.6	714.	714.
16.....	648.	68.1	649.	649.	650.	650.1	650.8	68.2	651.	651.	651.	652.
18.....	829.1	83.3	830.4	832.	833.7	835.6	838.	84.3	841.	844.	846.8	849.
19.....	858.6	84.3	860.1	861.3	862.7	864.5	865.6	84.5	866.5	868.4	869.5	870.6
20.....	843.	82.4	843.1	843.7	843.2	844.4	845.1	83.	846.	847.	847.8	848.
21.....	758.	77.3	759.	760.7	762.	763.8	765.	78.	766.	767.4	768.5	769.7
22.....	774.7	78.8	776.4	778.	779.2	781.	782.5	79.	783.	785.	786.	787.8
23.....	822.	82.8	823.	824.3	825.1	826.1	828.1	83.	830.4	833.	835.	837.6
25.....	788.6	78.3	789.9	789.	789.5	789.5	791.3	78.5	790.5	791.	791.7	792.
26.....	800.8	81.	802.	803.2	805.	806.9	810.7	81.3	818.	811.	812.7	814.2
27.....	861.5	84.3	863.1	862.7	866.5	868.5	868.3	84.	867.	868.2	870.	871.2
28.....	960.1	87.7	960.	960.	960.	959.6	959.	86.5	958.	957.6	956.4	955.5
29.....	912.	85.8	915.2	917.1	919.	920.8	921.5	86.5	923.3	925.	927.	929.6
30.....	953.	87.5	953.4	954.3	955.	956.	956.	87.8	957.	957.	958.	959.
Means.....	815.1	80.8	815.6	816.	816.8	818.6	819.6	80.9	820.4	821.2	822.	823.
Reduced to 32° Fah.....	147.		147.	147.	147.4	148.7	149.3		150.	150.7	151.4	152.3

* Supplied.

July.]

MINIMUM OF VERTICAL FORCE.

[1942.]

	<i>h. m.</i> 12 34 6 53½	Therm., Fah.	<i>h. m.</i> 12 40 6 59½	<i>h. m.</i> 12 46 7 05½	<i>h. m.</i> 12 52 7 11½	<i>h. m.</i> 12 58 7 17½	<i>h. m.</i> 13 04 7 23½	Therm., Fah.	<i>h. m.</i> 13 10 7 29½	<i>h. m.</i> 13 16 7 35½	<i>h. m.</i> 13 22 7 41½	<i>h. m.</i> 13 28 7 47½
Göttingen time.....												
Observatory time.....												
July 1.....	793.4	78.2	794.8	794.9	796.2	797.1	798.9	78.4	798.9	800.3	802.2	807.
2.....	897.2	80.3	877.7	869.5	865.1	858.7	852.8	80.4	850.	846.8	844.3	842.7
4.....	792.7	75.8	790.1	789.3	786.7	788.	788.	75.8	785.7	784.2	786.7	789.3
5.....	785.1	76.8	786.5	786.	785.7	785.	783.8	77.	783.	783.	783.	783.
6.....	760.	75.6	760.	760.1	760.	760.	760.8	75.8	760.9	760.2	760.2	760.3
7.....	710.	71.3	709.7	709.4	708.	707.	707.	71.2	707.	706.4	706.4	706.6
8.....	705.	71.7	705.	705.	705.	705.	705.	71.8	705.	705.5	705.5	705.7
9.....	.....	.....	.....	.....	.....	.....	.....	76.5	775.5	776.	776.	776.1
11.....	703.	71.3	704.1	705.	705.7	706.	705.	71.4	704.2	703.1	702.2	702.1
12.....	700.4	71.2	700.4	701.1	700.4	700.2	700.	71.1	700.	699.2	698.7	698.7
13.....	726.	73.	726.	725.3	724.6	723.7	723.3	73.2	723.5	723.3	723.1	722.9
14.....	730.6	77.7	729.9	729.6	729.2	728.7	728.7	77.8	728.7	728.7	728.7	728.7
15.....	753.4	74.3	752.9	752.5	752.4	752.5	752.4	74.2	752.	751.8	751.7	750.8
16.....	666.2	68.3	666.	666.	666.	665.	665.	68.3	665.	665.	665.	665.
18.....	728.5	73.2	728.4	729.	729.	729.	729.4	73.5	729.8	730.	730.	729.8
19.....	766.	76.	765.9	765.4	765.6	765.4	765.4	76.	765.5	765.4	765.	765.
20.....	807.6	77.4	807.3	805.9	805.2	804.7	804.1	77.3	803.	803.	802.5	801.9
21.....	694.8	69.8	694.2	694.	693.7	693.6	692.4	69.5	691.9	691.2	690.4	690.
22.....	715.9	71.7	715.2	714.5	714.5	714.6	713.9	71.7	714.	713.9	713.7	713.2
23.....	747.7	74.3	747.2	747.	746.5	746.2	747.	74.5	748.3	749.	750.5	749.
25.....	757.1	74.6	757.	757.	757.	757.	757.	74.4	757.	757.	757.	756.3
26.....	707.5	70.7	705.9	705.1	705.	705.	705.2	70.7	705.2	705.2	705.2	706.2
27.....	752.7	74.5	752.6	752.7	752.7	752.7	752.8	74.7	752.9	753.1	753.4	753.9
28.....	852.1	79.	852.	851.8	851.3	851.1	850.8	79.	850.4	850.8	853.8	856.6
29.....	863.9	79.3	862.9	863.8	863.	863.9	863.6	79.3	863.2	863.9	862.9	861.2
30.....	842.	83.8	853.3	859.6	867.5	871.3	874.1	81.4	875.7	876.8	877.	877.2
Means.....	760.4	74.8	760.2	760.	759.8	759.7	759.5	74.8	760.2	759.8	759.9	760.
Reduced to 32° Fah...	192.6		192.4	192.2	192.	191.9	191.7		192.2	191.5	191.3	191.2

[1942.]

MINIMUM OF VERTICAL FORCE—Continued.

July.]

Göttingen time.....	h. m.	Therm., Fah.	h. m.	Therm., Fah.	h. m.	Therm., Fah.	h. m.	Therm., Fah.	h. m.	Therm., Fah.	h. m.	Therm., Fah.	h. m.	Therm., Fah.	h. m.	Therm., Fah.	h. m.	Therm., Fah.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Observatory time.....	13 34		7 53½		13 40		7 59½		13 46		8 05½		13 52		8 11½		13 58		14 04		14 10		14 16		14 22		14 28		14 34		14 40		14 46		14 52		14 58		15 04		15 10		15 16		15 22		15 28		15 34		15 40		15 46		15 52		15 58		16 04		16 10		16 16		16 22		16 28		16 34		16 40		16 46		16 52		16 58		17 04		17 10		17 16		17 22		17 28		17 34		17 40		17 46		17 52		17 58		18 04		18 10		18 16		18 22		18 28		18 34		18 40		18 46		18 52		18 58		19 04		19 10		19 16		19 22		19 28		19 34		19 40		19 46		19 52		19 58		20 04		20 10		20 16		20 22		20 28		20 34		20 40		20 46		20 52		20 58		21 04		21 10		21 16		21 22		21 28		21 34		21 40		21 46		21 52		21 58		22 04		22 10		22 16		22 22		22 28		22 34		22 40		22 46		22 52		22 58		23 04		23 10		23 16		23 22		23 28		23 34		23 40		23 46		23 52		23 58		24 04		24 10		24 16		24 22		24 28		24 34		24 40		24 46		24 52		24 58		25 04		25 10		25 16		25 22		25 28		25 34		25 40		25 46		25 52		25 58		26 04		26 10		26 16		26 22		26 28		26 34		26 40		26 46		26 52		26 58		27 04		27 10		27 16		27 22		27 28		27 34		27 40		27 46		27 52		27 58		28 04		28 10		28 16		28 22		28 28		28 34		28 40		28 46		28 52		28 58		29 04		29 10		29 16		29 22		29 28		29 34		29 40		29 46		29 52		29 58		30 04		30 10		30 16		30 22		30 28		30 34		30 40		30 46		30 52		30 58		31 04		31 10		31 16		31 22		31 28		31 34		31 40		31 46		31 52		31 58		32 04		32 10		32 16		32 22		32 28		32 34		32 40		32 46		32 52		32 58		33 04		33 10		33 16		33 22		33 28		33 34		33 40		33 46		33 52		33 58		34 04		34 10		34 16		34 22		34 28		34 34		34 40		34 46		34 52		34 58		35 04		35 10		35 16		35 22		35 28		35 34		35 40		35 46		35 52		35 58		36 04		36 10		36 16		36 22		36 28		36 34		36 40		36 46		36 52		36 58		37 04		37 10		37 16		37 22		37 28		37 34		37 40		37 46		37 52		37 58		38 04		38 10		38 16		38 22		38 28		38 34		38 40		38 46		38 52		38 58		39 04		39 10		39 16		39 22		39 28		39 34		39 40		39 46		39 52		39 58		40 04		40 10		40 16		40 22		40 28		40 34		40 40		40 46		40 52		40 58		41 04		41 10		41 16		41 22		41 28		41 34		41 40		41 46		41 52		41 58		42 04		42 10		42 16		42 22		42 28		42 34		42 40		42 46		42 52		42 58		43 04		43 10		43 16		43 22		43 28		43 34		43 40		43 46		43 52		43 58		44 04		44 10		44 16		44 22		44 28		44 34		44 40		44 46		44 52		44 58		45 04		45 10		45 16		45 22		45 28		45 34		45 40		45 46		45 52		45 58		46 04		46 10		46 16		46 22		46 28		46 34		46 40		46 46		46 52		46 58		47 04		47 10		47 16		47 22		47 28		47 34		47 40		47 46		47 52		47 58		48 04		48 10		48 16		48 22		48 28		48 34		48 40		48 46		48 52		48 58		49 04		49 10		49 16		49 22		49 28		49 34		49 40		49 46		49 52		49 58		50 04		50 10		50 16		50 22		50 28		50 34		50 40		50 46		50 52		50 58		51 04		51 10		51 16		51 22		51 28		51 34		51 40		51 46		51 52		51 58		52 04		52 10		52 16		52 22		52 28		52 34		52 40		52 46		52 52		52 58		53 04		53 10		53 16		53 22		53 28		53 34		53 40		53 46		53 52		53 58		54 04		54 10		54 16		54 22		54 28		54 34		54 40		54 46		54 52		54 58		55 04		55 10		55 16		55 22		55 28		55 34		55 40		55 46		55 52		55 58		56 04		56 10		56 16		56 22		56 28		56 34		56 40		56 46		56 52		56 58		57 04		57 10		57 16		57 22		57 28		57 34		57 40		57 46		57 52		57 58		58 04		58 10		58 16		58 22		58 28		58 34		58 40		58 46		58 52		58 58		59 04		59 10		59 16		59 22		59 28		59 34		59 40		59 46		59 52		59 58		60 04		60 10		60 16		60 22		60 28		60 34		60 40		60 46		60 52		60 58		61 04		61 10		61 16		61 22		61 28		61 34		61 40		61 46		61 52		61 58		62 04		62 10		62 16		62 22		62 28		62 34		62 40		62 46		62 52		62 58		63 04		63 10		63 16		63 22		63 28		63 34		63 40		63 46		63 52		63 58		64 04		64 10		64 16		64 22		64 28		64 34		64 40		64 46		64 52		64 58		65 04		65 10		65 16		65 22		65 28		65 34		65 40		65 46		65 52		65 58		66 04		66 10		66 16		66 22		66 28		66 34		66 40		66 46		66 52		66 58		67 04		67 10		67 16		67 22		67 28		67 34		67 40		67 46		67 52		67 58		68 04		68 10		68 16		68 22		68 28		68 34		68 40		68 46		68 52		68 58		69 04		69 10		69 16		69 22		69 28		69 34		69 40		69 46		69 52		69 58		70 04		70 10		70 16		70 22		70 28		70 34		70 40		70 46		70 52		70 58		71 04		71 10		71 16		71 22		71 28		71 34		71 40		71 46		71 52		71 58		72 04		72 10		72 16		72 22		72 28		72 34		72 40		72 46		72 52		72 58		73 04		73 10		73 16		73 22		73 28		73 34		73 40		73 46		73 52		73 58		74 04		74 10		74 16		74 22		74 28		74 34		74 40		74 46		74 52		74 58		75 04		75 10		75 16		75 22		75 28		75 34		75 40		75 46		75 52		75 58		76 04		76 10		76 16		76 22		76 28		76 34		76 40		76 46		76 52		76 58		77 04		77 10		77 16		77 22		77 28		77 34		77 40		77 46		77 52		77 58		78 04		78 10		78 16		78 22		78 28		78 34		78 40		78 46		78 52		78 58		79 04		79 10		79 16		79 22		79 28		79 34		79 40		79 46		79 52		79 58		80 04		80 10		80 16		80 22		80 28		80 34		80 40		80 46		80 52		80 58		81 04		81 10		81 16		81 22		81 28		81 34		81 40		81 46		81 52		81 58		82 04		82 10		82 16		82 22		82 28		82 34		82 40		82 46		82 52		82 58		83 04		83 10		83 16		83 22		83 28		83 34		83 40		83 46		83 52		83 58		84 04		84 10		84 16		84 22		84 28		84 34		84 40		84 46		84 52		84 58		85 04		85 10		85 16		85 22		85 28		85 34		85 40		85 46		85 52		85 58		86 04		86 10		86 16		86 22		86 28		86 34		86 40		86 46		86 52		86 58		87 04		87 10		87 16		87 22		87 28		87 34		87 40		87 46		87 52		87 58		88 04		88 10		88 16		88 22		88 28		88 34		88 40		88 46		88 52		88 58		89 04		89 10		89 16		89 22		89 28		89 34		89 40		89 46		89 52		89 58		90 04		90 10		90 16		90 22		90 28		90 34		90 40		90 46		90 52		90 58		91 04		91 10		91 16		91 22		91 28		91 34		91 40		91 46		91 52		91 58		92 04		92 10		92 16		92 22		92 28		92 34		92 40		92 46		92 52		92 58		93 04		93 10		93 16		93 22		93 28		93 34		93 40		93 46		93 52		93 58		94 04		94 10		94 16		94 22		94 28		94 34		94 40		94 46		94 52		94 58		95 04		95 10		95 16		95 22		95 28		95 34		95 40		95 46		95 52		95 58		96 04		96 10		96 16		96 22		96 28		96 34		96 40		96 46		96 52		96 58		97 04		97 10		97 16		97 22		97 28		97 34		97 40		97 46		97 52		97 58		98 04		98 10		98 16

[1842.]

FIRST MAXIMUM OF HORIZONTAL FORCE.

JULY.]

Göttingen time..... Observatory time.....	<i>h. m.</i> 11 32 5 51½	Therm., Fah.	<i>h. m.</i> 11 38 5 57½	<i>h. m.</i> 11 44 6 03½	<i>h. m.</i> 11 50 6 09½	<i>h. m.</i> 11 56 6 15½	<i>h. m.</i> 12 02 6 21½	Therm., Fah.	<i>h. m.</i> 12 08 6 27½	<i>h. m.</i> 12 14 6 33½	<i>h. m.</i> 12 20 6 39½	<i>h. m.</i> 12 26 6 45½	Therm., Fah.
July 1.....	698.1	71.7	698.	700.5	699.9	700.9	697.1	71.5	691.3	686.2	685.5	685.	71.3
2.....	746.4	79.5	726.5	735.3	741.	760.7	766.	79.7	791.	796.2	784.9	781.7	79.9
4.....	803.5	75.3	795.6	791.7	791.2	791.5	781.1	75.1	788.1	778.9	773.5	761.7	75.
5.....	723.8	76.3	723.4	722.6	722.9	722.6	723.3	76.3	722.2	723.1	723.1	723.4	76.3
6.....	693.	74.8	693.	695.3	695.1	697.6	698.3	74.8	701.6	705.1	707.	707.5	74.7
7.....	685.2	70.7	685.7	686.5	686.7	686.7	686.	70.5	688.9	687.	686.1	685.	70.4
8.....	680.	71.1	680.2	681.	681.2	680.	680.7	71.	681.	681.5	681.1	680.1	71.
9.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11.....	709.5	69.6	709.	708.7	706.5	704.5	701.9	69.7	697.5	696.2	695.	694.5	69.8
12.....	690.	70.	692.4	.....	690.9	691.	691.8	70.	690.8	688.2	690.7	691.8	70.
13.....	692.3	72.4	691.4	690.8	689.9	689.4	687.6	72.2	685.5	682.9	681.	682.1	72.1
14.....	686.7	77.	686.2	685.8	684.9	683.8	681.4	77.	690.4	679.7	682.3	685.	77.
15.....	698.2	73.5	697.3	697.3	696.6	696.5	694.4	73.5	695.	695.6	695.1	693.1	73.5
16.....	677.5	67.5	676.	672.5	668.8	667.5	667.1	67.5	668.	668.8	671.6	672.7	67.5
18.....	686.8	73.	687.	687.	687.5	688.1	688.7	73.6	687.5	686.9	687.4	686.7	73.7
19.....	688.7	74.6	690.5	688.	688.7	689.	689.9	74.8	689.6	689.4	687.4	686.2	75.2
20.....	708.3	76.4	706.8	705.	702.5	704.9	707.9	76.4	708.4	710.2	710.5	711.9	76.4
21.....	673.2	69.	674.8	672.8	673.5	672.7	672.6	68.7	678.5	673.5	673.7	674.1	68.7
23.....	676.8	70.	675.7	674.8	673.7	672.	671.5	70.3	671.9	673.	673.6	673.7	70.7
23.....	694.6	73.7	694.	693.5	693.4	690.1	691.2	73.5	690.	690.	691.1	694.6	73.7
25.....	700.2	73.7	699.5	696.4	696.6	696.8	696.	73.7	697.2	696.8	698.8	703.1	73.7
26.....	686.4	69.5	685.3	684.6	682.6	681.2	681.9	69.5	689.	683.2	689.7	678.5	69.5
27.....	710.5	73.3	706.	703.6	702.3	698.8	696.5	73.3	693.2	693.3	690.4	690.1	74.2
28.....	703.6	78.	703.	703.3	701.5	706.	704.6	78.2	704.9	706.8	709.8	712.	78.
29.....	705.8	78.6	705.	704.9	703.2	703.2	701.3	78.6	699.7	698.1	697.	696.5	78.6
30.....	723.7	78.6	721.8	719.7	716.4	714.8	713.8	78.7	712.7	710.3	710.9	711.2	78.8
Means.....	701.	73.4	700.1	700.1	699.9	699.6	699.	73.4	699.1	699.	699.	699.	73.5
Reduced to 32° Fah.....	593.4		592.5	592.4	592.3	592.	591.4		591.4	591.2	591.1	591.	

[1842.]

SECOND MAXIMUM OF HORIZONTAL FORCE.

July.]

Göttingen time. Observatory time.	h. m.		Therm., Fah.	h. m.		h. m.	h. m.		Therm., Fah.	h. m.		h. m.	h. m.		h. m.
	21 08	15 21½		21 14	15 33½		21 20	15 39½		21 26	15 45½		21 32	15 51½	
July 1.....	694.3	697.6	87.7	696.2	695.6	695.6	697.6	697.6	88.7	696.7	696.7	692.7	690.8	698.9	689.6
2.....	690.7	644.	83.9	691.8	647.7	647.7	644.	644.	82.7	666.2	666.2	668.4	673.3	657.5	665.2
3.....	704.	755.9	80.	749.5	749.3	749.3	755.9	755.9	80.3	725.	725.	726.5	723.4	722.9	724.1
4.....	717.1	718.4	79.7	716.3	715.5	715.5	718.4	718.4	80.	714.9	714.9	716.	715.6	715.	715.6
5.....	694.5	693.7	75.5	697.7	693.5	693.5	693.7	693.7	75.5	674.	674.	672.7	668.	672.2	670.1
6.....	694.5	698.6	73.	697.2	695.8	695.8	698.6	698.6	73.7	693.	693.	695.5	694.2	696.	698.2
7.....	693.	693.2	75.7	693.	691.7	691.7	693.2	693.2	76.	687.7	687.7	688.8	689.	689.5	684.5
8.....	702.2	697.7	76.	696.7	691.2	691.2	697.7	697.7	76.	680.8	680.8	712.	721.7	723.	714.8
9.....	696.2	695.	76.4	694.	691.1	691.1	695.	695.	76.4	686.7	686.7	688.8	682.4	682.6	680.7
10.....	691.6	689.	76.1	686.3	685.8	685.8	689.	689.	76.9	676.4	676.4	675.6	676.2	674.7	672.6
11.....	694.3	699.2	81.	696.8	695.2	695.2	699.2	699.2	81.6	695.1	695.1	698.	693.	694.5	698.2
12.....	702.2	700.4	84.	700.3	697.1	697.1	700.4	700.4	84.	690.1	690.1	693.	697.5	700.	701.1
13.....	671.7	666.	71.	669.4	668.4	668.4	666.	666.	71.	659.8	659.8	661.7	656.	660.4	660.2
14.....	663.	663.	67.5	657.5	652.	652.	663.	663.	67.7	655.2	655.2	658.	658.	670.7	669.7
15.....	691.1	695.2	82.	694.	695.7	695.7	695.2	695.2	82.6	698.2	698.2	699.	698.8	698.6	697.3
16.....	712.5	713.2	83.5	711.2	718.	718.	713.2	713.2	84.1	725.5	725.5	724.	727.	729.4	727.7
17.....	691.8	695.5	81.5	692.7	692.	692.	695.5	695.5	81.6	706.2	706.2	713.2	714.2	719.8	723.2
18.....	687.3	685.2	75.2	688.7	684.5	684.5	685.2	685.2	75.7	686.2	686.2	687.	687.9	688.6	687.2
19.....	687.5	684.5	77.3	689.6	692.6	692.6	684.5	684.5	77.8	686.7	686.7	687.3	692.4	692.	692.8
20.....	712.7	707.4	81.2	723.2	732.8	732.8	707.4	707.4	82.	710.3	710.3	700.7	693.	698.	706.
21.....	696.8	695.	76.8	692.9	693.3	693.3	695.	695.	76.9	691.3	691.3	693.	691.4	692.1	693.
22.....	690.9	692.5	79.5	693.	694.6	694.6	692.5	692.5	80.	694.5	694.5	692.	695.3	696.7	699.2
23.....	719.3	714.4	71.4	716.2	717.	717.	714.4	714.4	80.	722.	722.	719.7	719.2	711.3	710.3
24.....	707.5	710.9	83.8	706.9	700.3	700.3	710.9	710.9	83.9	715.2	715.2	721.4	724.8	725.4	720.
25.....	719.	720.2	84.	721.9	722.	722.	720.2	720.2	84.9	734.7	734.7	739.5	746.	748.7	738.7
26.....	733.5	742.4	86.1	741.2	732.9	732.9	742.4	742.4	86.6	736.1	736.1	732.9	733.1	733.5	738.8
Means.....	698.3	698.6	79.3	697.1	697.1	697.1	698.6	698.6	79.7	696.9	696.9	698.1	698.8	699.3	699.2
Reduced to 32° Fah.....	575.3	575.3		573.7	573.5	573.5	575.3	575.3		572.9	572.9	574.	574.5	574.9	574.6

July.]

SECOND MAXIMUM OF HORIZONTAL FORCE—Continued.

[1842.

Göttingen time..... Observatory time.....	<i>h. m.</i> 22 02 16 21½	Therm., Fah.	<i>h. m.</i> 22 08 16 27½	<i>h. m.</i> 22 14 16 33½	<i>h. m.</i> 22 20 16 39½	<i>h. m.</i> 22 26 16 45½	<i>h. m.</i> 22 32 16 51½	Therm., Fah.	<i>h. m.</i> 22 38 16 57½	<i>h. m.</i> 22 44 17 03½	<i>h. m.</i> 22 50 17 09½	<i>h. m.</i> 22 56 17 15½	Therm., Fah.
July 1.....	690.	88.3	690.	699.2	697.1	691.7	693.5	88.5	694.4	691.5	698.4	709.1	88.7
2.....	656.9	82.5	644.4	623.2	634.4	596.5	605.2	82.3	629.2	636.	663.9	689.2	82.2
3.....	731.	80.5	746.4	748.	746.4	751.6	753.7	80.7	754.5	756.5	756.	755.	80.8
4.....	716.	80.1	715.7	716.	718.3	721.	721.1	80.4	722.5	722.5	722.2	720.7	80.6
5.....	675.	75.8	679.2	649.5	649.5	659.2	634.5	76.	653.8	655.8	661.3	676.2	76.2
6.....	696.2	74.3	695.9	696.5	696.5	695.1	696.7	74.8	698.6	696.7	697.5	699.2	75.2
7.....	681.6	76.6	679.6	681.9	680.2	675.	673.7	77.	671.7	677.2	676.	673.5	77.2
8.....	713.	78.	711.	715.7	738.	735.8	737.2	78.	726.2	716.5	700.5	689.	78.
9.....	680.9	76.8	684.7	686.8	685.7	686.1	686.1	77.	684.7	687.4	687.8	684.3	77.
10.....	675.3	77.5	676.8	679.4	680.8	682.9	679.6	78.4	690.7	680.8	681.6	683.2	78.8
11.....	700.	82.	700.6	698.2	697.	699.4	699.	83.	702.	704.5	700.3	702.6	83.6
12.....	708.	83.5	743.3	704.2	704.7	706.	706.3	83.2	710.	711.3	711.7	713.	83.
13.....	663.2	70.7	663.	665.7	672.9	676.9	675.7	70.5	677.	676.8	676.5	677.	70.3
14.....	666.	67.7	670.9	672.	675.2	676.6	673.4	68.	673.	674.2	671.8	674.5	68.2
15.....	696.7	83.3	695.8	696.6	697.5	699.7	702.2	84.	704.1	704.2	705.	705.7	84.6
16.....	722.	84.5	722.	723.7	724.5	726.2	725.2	84.8	723.5	730.2	728.	729.7	85.
17.....	723.5	81.9	724.	725.	719.	716.1	714.	82.2	714.9	714.1	709.3	707.1	82.2
18.....	688.3	76.2	683.	685.5	689.2	692.4	689.	77.	690.7	691.	691.5	693.9	77.6
19.....	696.5	78.3	697.8	702.7	703.3	702.2	701.	78.8	701.1	702.4	701.8	702.6	79.2
20.....	710.	82.7	707.7	713.	718.	722.	734.6	83.	749.2	762.5	760.4	764.	83.3
21.....	694.7	77.	688.5	687.2	688.2	683.2	686.	77.2	686.5	689.	692.7	691.3	77.4
22.....	699.2	80.5	697.8	697.	698.7	702.1	701.6	81.	701.	702.5	702.3	705.6	81.5
23.....	712.	84.2	716.2	708.2	715.	713.4	713.	84.	717.4	714.7	721.	718.6	84.2
24.....	716.7	84.	712.5	712.2	712.7	716.5	721.1	84.5	725.	731.5	730.6	726.7	84.7
25.....	745.2	85.5	755.3	744.8	743.7	742.	729.2	86.	737.7	730.3	735.7	738.	86.4
26.....	736.5	87.	738.8	738.5	743.5	745.2	741.2	87.	735.	737.5	741.	745.5	87.
Means.....	699.6	80.	699.6	698.9	701.1	700.6	699.8	80.3	702.1	703.7	704.7	706.7	80.5
Reduced to 32° Fah.....	574.9		574.7	573.9	575.9	575.3	574.3		576.4	577.8	578.7	580.6	

[1842.]

FIRST MINIMUM OF HORIZONTAL FORCE.

Juzr.]

Göttingen time..... Observatory time.....	h. m. 1 02 19 31½	Therm., Fah.	h. m. 1 08 19 27½	h. m. 1 14 19 33½	h. m. 1 20 19 39½	h. m. 1 26 19 45½	h. m. 1 32 19 51½	Therm., Fah.	h. m. 1 38 19 57½	h. m. 1 44 20 03½	h. m. 1 50 20 09½	h. m. 1 56 20 15½
July 1.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2.....	744.4	80.8	743.2	741.4	739.9	738.1	738.5	80.8	741.1	740.	746.1	746.2
4.....	734.2	80.	740.5	736.	740.4	737.7	735.8	79.8	732.7	729.5	729.3	732.1
5.....	677.1	75.9	668.	680.1	655.1	686.6	690.	75.5	745.7	754.5	741.2	742.
6.....	701.2	75.3	700.1	698.	698.7	699.9	705.	75.3	704.4	707.6	707.1	708.7
7.....	.....	78.	712.	719.5	731.	739.7	740.7	78.	736.	727.5	730.8	711.7
8.....	731.	77.	733.1	730.	728.5	731.	730.2	77.	730.	707.4	693.7	701.3
9.....	698.2	77.	701.5	704.8	700.3	700.7	705.4	76.1	709.4	711.1	714.7	712.8
11.....	730.7	79.8	717.7	711.8	712.3	710.6	714.6	79.	717.1	720.	719.3	718.6
12.....	717.4	84.	716.1	716.	720.3	720.5	719.2	83.9	720.7	716.7	716.	722.2
13.....	.....	82.5	721.3	720.6	721.	719.	719.4	82.3	716.7	693.	681.4	715.9
14.....	682.5	70.	682.	679.	678.	679.	680.7	69.8	681.	678.3	679.	678.3
15.....	680.	68.1	679.	678.	677.9	675.9	678.	68.2	678.7	707.5	707.2	710.
16.....	.....	84.	708.9	710.2	707.5	707.7	708.3	84.	719.2	721.	718.4	710.5
17.....	716.3	84.3	714.	718.5	719.	718.5	720.	84.	718.	717.5	718.2	719.6
18.....	731.2	80.8	729.5	725.5	721.	718.5	717.9	80.	702.	703.8	703.	704.
19.....	.....	77.5	706.	704.7	703.9	700.	701.3	77.4	700.5	700.6	697.5	698.
20.....	703.7	79.5	699.1	703.7	702.6	699.1	698.	79.2	700.5	743.8	743.	736.
21.....	736.1	84.4	734.5	736.3	736.7	737.4	734.1	84.	706.3	704.1	705.3	704.9
22.....	707.	77.	707.1	708.	707.2	707.5	708.	76.8	714.4	716.1	714.5	718.7
23.....	718.2	82.	717.	718.2	715.2	714.	713.7	81.8	738.	725.	726.5	728.4
24.....	725.7	83.	723.5	726.2	730.6	731.	728.8	83.	737.	741.9	744.	742.
25.....	738.	84.5	730.	731.2	734.6	734.4	735.6	84.	749.4	763.7	757.5	753.2
26.....	732.	86.2	723.	725.2	725.7	728.7	734.2	86.	745.5	741.8	729.7	726.2
27.....	731.7	87.	735.2	737.1	738.	743.7	745.3	87.	720.1	719.9	718.	717.4
Means.....	715.8	79.9	714.1	713.8	714.4	715.	716.8	79.7	596.3	596.2	594.5	594.
Reduced to 32° Fah....	591.6		589.6	589.5	590.2	590.9	592.8					

Göttingen time..... Observatory time.....	A. m. 2 02 20 21½	Therm., Fah.	A. m. 2 08 20 27½	A. m. 2 14 20 33½	A. m. 2 20 20 39½	A. m. 2 26 20 45½	A. m. 2 32 20 51½	Therm., Fah.	A. m. 2 38 20 57½	A. m. 2 44 21 03½	A. m. 2 50 21 09½	A. m. 2 56 21 15½	Therm., Fah.
July 1.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2.....	739.9	80.5	734.9	737.	739.7	739.7	747.6	80.1	746.2	751.8	754.1	758.1	79.8
3.....	736.2	79.6	740.5	738.1	732.9	730.7	730.6	79.4	738.6	732.3	730.6	741.	79.5
4.....	742.6	75.6	738.5	736.	733.7	731.9	730.1	75.4	730.	728.9	725.2	730.6	75.2
5.....	705.1	76.	702.7	702.9	702.7	703.2	702.7	74.9	702.4	702.6	703.2	702.9	74.8
6.....	709.7	78.	711.3	714.5	713.	726.1	735.	78.	739.9	721.4	714.3	715.7	78.
7.....	701.7	77.	700.4	710.9	724.1	723.5	728.2	77.	756.7	740.9	737.5	736.7	77.
8.....	711.2	75.7	709.5	709.4	716.5	714.1	707.9	75.2	705.6	704.3	708.5	712.2	74.8
9.....	718.3	78.7	717.5	718.	717.9	696.3	680.6	78.5	692.6	694.1	695.1	699.8	78.3
10.....	722.2	83.	722.7	724.4	724.7	728.	725.2	82.5	724.4	724.3	728.3	728.4	82.
11.....	717.5	82.2	718.8	719.4	721.9	721.1	721.5	82.	723.2	724.1	724.5	724.5	81.9
12.....	678.3	69.8	680.	680.8	679.1	679.	679.7	69.8	676.2	675.9	676.4	675.4	69.8
13.....	677.1	68.3	678.7	678.4	678.1	681.5	683.	68.4	684.7	683.5	682.8	681.9	68.5
14.....	708.9	83.6	709.8	709.6	711.2	710.5	716.2	83.2	719.5	722.7	725.4	732.2	82.8
15.....	717.2	83.8	716.1	719.6	717.7	715.6	718.5	83.7	718.7	713.6	714.4	721.1	83.6
16.....	722.2	79.4	725.	726.2	727.5	727.3	729.8	78.5	729.2	727.	726.5	726.	77.9
17.....	703.7	77.3	703.5	702.8	704.	703.9	705.2	77.2	704.1	701.8	701.1	701.	77.1
18.....	698.5	79.	699.	695.8	693.7	693.	696.3	79.	697.6	703.8	702.	701.2	79.
19.....	732.	83.5	728.1	717.5	717.2	714.	718.7	83.	724.7	731.5	741.	744.7	82.5
20.....	706.4	76.2	708.3	706.1	706.9	708.	708.8	75.8	708.7	708.1	707.7	703.2	75.4
21.....	719.6	80.7	719.5	719.2	719.2	716.7	715.4	80.3	715.3	715.8	714.7	714.7	80.
22.....	725.5	82.8	722.2	719.5	722.7	726.	726.1	82.6	726.8	727.2	726.7	724.6	82.4
23.....	741.5	83.5	743.6	745.	743.2	745.7	747.6	83.	746.2	746.5	746.5	744.4	82.5
24.....	743.5	85.6	742.4	746.6	752.2	759.6	762.2	85.4	767.6	767.2	762.9	756.5	85.2
25.....	725.5	86.8	729.7	736.6	734.5	730.3	727.7	86.4	729.2	732.	736.2	736.4	86.
Means.....	716.4	79.4	716.8	717.3	718.1	717.7	718.5	79.1	720.3	720.1	720.1	720.4	79.
Reduced to 32° Fah.....	593.2		593.7	594.4	595.3	595.	596.		597.9	597.8	597.9	598.3	

[1842.]

SECOND MINIMUM OF HORIZONTAL FORCE.

JULY.]

Göttingen time..... Observatory time.....	h. m. 15 32 9 51½	Therm., Fah.	h. m. 15 38 9 57½	h. m. 15 44 10 03½	h. m. 15 50 10 09½	h. m. 15 56 10 15½	h. m. 16 02 10 21½	Therm., Fah.	h. m. 16 08 10 27½	h. m. 16 14 10 33½	h. m. 16 20 10 39½	h. m. 16 26 10 45½
July 1.....	698.5	80.3	690.9	692.7	693.9	695.1	699.1	30.9	698.6	698.5	699.6	698.9
2.....	732.	80.8	739.	733.7	730.	734.	736.8	81.	737.1	739.1	739.7	739.
4.....	817.	77.3	820.7	818.2	808.9	817.7	832.9	77.5	821.7	828.	817.7	833.
5.....	761.6	76.8	760.2	748.5	746.5	749.7	749.	77.	748.4	748.6	749.	751.
6.....	741.8	75.1	743.	742.7	741.1	744.2	747.	75.	744.1	742.5	738.3	739.
7.....	714.6	69.2	712.4	711.6	709.6	716.7	718.2	69.3	717.1	713.7	715.5	716.4
8.....	717.5	71.6	719.8	722.4	722.6	721.7	722.8	72.	723.6	723.6	723.3	723.8
9.....	715.3	76.3	717.	715.1	714.	718.	727.1	76.2	740.1	734.6	720.5	730.3
11.....	723.3	72.	724.5	725.2	726.	731.5	734.4	72.5	729.	718.6	720.5	718.6
12.....	717.2	70.6	721.5	722.2	719.5	716.1	715.1	71.	715.1	715.6	717.5	718.3
13.....	739.1	75.1	737.3	736.	734.3	739.6	739.7	75.6	737.7	736.3	734.8	734.8
14.....	733.	79.3	734.4	736.	737.5	738.5	739.8	79.8	741.3	741.2	742.	742.3
15.....	711.6	72.5	713.2	715.8	719.8	721.	722.3	72.2	721.1	719.9	720.	720.
16.....	698.5	67.	699.5	697.7	696.	695.5	696.	67.	692.5	691.	690.	688.7
18.....	696.6	75.1	698.5	698.9	699.5	701.	697.4	75.6	698.	698.4	697.3	698.4
19.....	716.3	76.3	715.7	716.5	716.1	715.3	714.9	76.8	712.1	708.6	712.4	712.6
20.....	725.3	77.1	723.8	721.9	718.3	718.1	724.	77.4	724.4	724.	721.4	719.1
21.....	704.1	70.5	709.5	708.3	708.6	708.3	707.6	71.	708.8	709.	708.5	708.3
22.....	712.8	72.5	710.3	709.8	711.4	709.7	709.	72.8	710.3	713.4	713.2	713.5
23.....	725.7	75.5	724.	.....	724.6	727.	725.4	76.	728.	729.	730.7	732.8
25.....	732.8	73.9	733.	732.7	737.1	734.	733.1	74.4	736.5	737.4	737.	736.1
26.....	720.	73.2	723.8	731.1	735.	731.3	734.7	73.6	736.2	734.3	736.	733.7
27.....	718.7	76.	721.6	718.8	720.	715.7	713.	77.	713.3	711.3	715.7	717.2
28.....	731.	79.	733.8	730.	726.1	724.1	723.3	79.2	721.6	721.7	721.7	718.
29.....	716.2	78.2	717.2	721.4	715.6	718.5	722.7	78.4	726.6	730.	728.4	726.8
30.....	761.1	81.6	763.7	758.5	757.2	752.2	745.8	82.1	741.	741.7	738.	732.3
Means.....	725.6	75.1	726.9	726.6	725.8	726.7	728.1	75.4	727.8	727.3	726.9	727.9
Reduced to 32° Fah.....	613.5		614.7	614.2	613.2	614.	615.2		614.7	614.	613.2	614.3

Göttingen time..... Observatory time.....	<i>h. m.</i> 16 32 10 51½	Therm., Feb.	<i>h. m.</i> 16 44 11 03½	<i>h. m.</i> 16 50 11 09½	<i>h. m.</i> 16 56 11 15½	<i>h. m.</i> 17 02 11 21½	Therm., Feb.	<i>h. m.</i> 17 08 11 27½	<i>h. m.</i> 17 14 11 33½	<i>h. m.</i> 17 20 11 39½	<i>h. m.</i> 17 26 11 45½	Therm., Feb.
July 1.....	699.	81.5	700.6	706.	705.4	703.3	82.1	702.4	699.1	700.	701.6	82.6
2.....	743.2	81.2	730.	729.7	737.	741.2	81.6	745.	755.5	764.5	767.8	82.
4.....	822.	77.6	838.4	806.4	803.1	798.	77.8	787.1	784.1	784.7	808.2	73.
5.....	760.4	77.2	750.1	748.3	761.3	751.7	77.4	750.2	750.	747.2	745.	77.5
6.....	736.4	75.	733.8	730.2	725.	724.	75.	718.7	715.	715.6	716.	75.
7.....	716.8	69.4	719.2	722.	722.4	725.6	69.4	727.	732.8	718.8	717.4	69.5
8.....	724.2	72.4	724.9	726.	724.7	726.7	72.8	727.1	727.	727.7	727.9	73.1
9.....	733.	76.3	736.	731.5	734.5	755.	76.5	749.6	747.5	742.4	740.	76.7
11.....	722.9	73.	723.3	721.4	715.1	713.	73.6	713.7	710.4	703.1	708.8	73.9
12.....	721.3	71.4	721.1	719.6	719.8	722.	71.8	721.8	724.1	726.2	722.2	72.3
13.....	734.4	76.2	733.3	728.4	728.5	725.5	76.6	725.3	734.4	732.5	718.5	77.2
14.....	741.8	80.2	742.3	741.7	741.2	741.3	80.5	741.3	739.3	738.8	737.3	80.9
15.....	719.1	72.1	719.1	722.3	721.2	718.7	72.	716.9	715.2	712.8	712.	71.8
16.....	687.	67.	685.5	683.	684.5	681.	67.	681.7	679.6	677.7	674.7	67.
18.....	699.9	76.2	700.4	701.4	701.7	702.	76.8	703.4	704.	703.1	704.2	77.2
19.....	712.3	77.6	713.8	715.7	712.	708.5	78.4	707.8	713.4	716.1	706.9	79.
20.....	725.2	77.8	721.3	709.	708.2	707.	78.2	705.	707.6	708.	703.6	78.6
21.....	707.7	71.3	707.1	709.	707.6	706.5	71.7	707.4	707.6	708.1	708.5	72.
22.....	716.5	73.2	715.2	716.	716.4	717.	73.6	714.8	715.2	710.7	709.1	74.
23.....	732.2	76.5	740.9	737.2	738.1	738.7	77.	737.9	735.4	737.	740.6	77.3*
25.....	737.5	74.8	739.2	743.6	744.7	743.9	75.	743.	741.8	742.	742.	75.
26.....	731.8	74.4	730.7	728.5	731.5	733.	74.9	732.8	730.2	729.	729.3	75.3
27.....	716.5	77.8	717.5	718.9	718.7	716.7	78.5	716.9	716.7	717.	717.3	79.
28.....	717.7	79.4	717.9	714.6	712.	715.	80.	712.7	711.2	711.2	711.2	80.5
29.....	722.4	78.8	723.3	726.	726.5	721.	79.3	713.5	716.2	718.3	717.3	79.6
30.....	732.4	82.5	731.2	728.5	725.5	723.5	83.1	723.1	725.5	723.3	719.6	83.6
Means.....	727.1	75.8	727.5	725.8	725.6	725.2	76.2	724.1	724.3	723.5	723.3	76.5
Reduced to 32° Fah.....	613.2		613.4	611.3	610.9	610.1		609.	609.	608.	607.6	

[1843.]

FIRST MAXIMUM OF DECLINATION.

Aveuer.]

Göttingen time.....	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Observatory time	6 00	6 06	6 12	6 18	6 24	6 30	6 36	6 42	6 48	6 54	7 00	7 06
	0 19½	0 25½	0 31½	0 37½	0 43½	0 49½	0 55½	1 01½	1 07½	1 13½		
Aug. 1.....	593.5	594.8	593.3	592.5	591.8	591.	591.8	586.7	575.2	570.3		
2.....	565.4	565.3	566.	566.1	565.8	566.	566.6	566.3	566.2	566.3		
3.....	566.1	567.2	566.2	566.4	566.4	566.8	566.9*	566.8	566.8	566.6		
4.....	564.3	564.2	565.	564.5	567.5	564.4	567.1	565.1	565.6	564.7		
5.....	567.7	567.6	567.7	567.8	.....	.....	.....	.....	.....	569.5		
6.....	586.7	585.5	585.1	582.2	577.1	578.3	578.1	574.8	544.5	584.9		
7.....	566.	565.	564.6	565.	564.9	564.	561.	564.	564.8	565.5		
8.....	.....	.....	.....	567.	566.8	565.4	566.4	565.4	565.7	564.1*		
9.....	.....	566.8	564.9	563.7	567.6	567.3	566.4	565.7	568.1	565.3		
10.....	566.5	566.8	569.8	568.7	567.6	567.6	567.9	568.	568.8	.....	
11.....	571.3	570.	569.8	568.7	567.6	567.6	567.9	568.	568.8	.....	
12.....	560.7	560.2	561.	562.7	563.1	563.7	563.9	563.8	563.	562.2		
13.....	560.	559.8	559.7	559.7	560.	560.1	559.6	559.7	559.8	559.9		
14.....	554.	553.	553.	553.	552.9	562.8	552.8	552.5	552.6	552.3		
15.....	553.5	553.	552.5	552.1	551.	551.3	553.1	551.7	551.3	551.5		
16.....	558.3	558.2	558.3	558.1	555.6	557.2	554.6	554.	556.3	556.1		
17.....	564.7	565.1	566.1	566.4	566.1	564.5	564.1	564.1	563.7	563.		
18.....	566.1	566.	565.5	564.9	565.	564.9	564.2	563.1	563.9	564.5		
19.....	562.1	562.	564.3	564.3	564.3	559.2	558.9	559.7	560.9	560.3		
20.....	563.2	562.7	563.1	562.1	562.	551.9	552.	552.1	552.2	552.3		
21.....	560.7	560.2	561.4	563.3	564.8	566.	566.3	567.	566.8	564.6		
22.....	566.4	566.2	565.6	566.	565.6	565.8	566.1	565.7	562.9	566.9		
23.....	562.2	564.9	565.	564.1	564.	564.4	564.8	561.5	566.	569.2		
24.....	566.9	564.9	565.7	565.	565.1	565.	566.	566.1	566.	565.5		
25.....	566.1	564.9	564.5	563.	560.	567.5	562.8	563.8	563.7	565.6		
26.....	567.6	567.3	567.1	567.3	566.9	565.2	565.2	565.9	566.	566.3		
27.....	567.5	567.	566.8	569.	569.	569.	564.3	565.	569.2	569.		
28.....	564.	565.2	565.8	565.9	565.5	565.1	565.9	566.1	565.8	565.5		
29.....	565.4	565.3	565.5	565.2	564.9	564.4	564.5	564.1	563.1	563.5		
30.....	565.4	565.3	565.5	565.2	564.9	564.4	564.5	564.1	563.1	563.5		
31.....	565.4	565.3	565.5	565.2	564.9	564.4	564.5	564.1	563.1	563.5		
Means.....	565.4	565.3	565.5	565.2	564.9	564.4	564.5	564.1	563.1	563.5		

August.]

FIRST MAXIMUM OF DECLINATION—Continued.

[1843.]

	<i>h. m.</i> 7 00 1 19½	<i>h. m.</i> 7 06 1 25½	<i>h. m.</i> 7 12 1 31½	<i>h. m.</i> 7 18 1 37½	<i>h. m.</i> 7 24 1 43½	<i>h. m.</i> 7 30 1 49½	<i>h. m.</i> 7 36 1 55½	<i>h. m.</i> 7 42 2 01½	<i>h. m.</i> 7 48 2 07½	<i>h. m.</i> 7 54 2 13½
Göttingen time.....										
Observatory time.....										
Aug. 1.....	562.4	555.8	557.7	562.8	563.8	564.2	567.3	568.5	570.9	571.4
2.....	566.1	566.2	566.7	566.3	566.6	566.3	566.7	566.4	567.1	566.5
3.....	566.5	567.1	567.3	567.4	568.3	568.4	568.3	566.1	566.6	566.7
4.....	564.6	564.9	565.7	566.2	565.7	567.4	565.9	565.8	566.6	566.5
5.....	570.0	570.1	571.2	572.	572.	572.3	571.7	571.6	571.8	571.6
6.....	565.	554.7	550.4	548.5	547.3	562.	562.9	566.	566.9	570.6
7.....	565.	565.7	565.9	566.1	566.	565.3	565.7	565.	565.2	566.3
8.....	565.	562.7	562.5	565.	566.7	565.	566.5	565.	565.4	566.1
9.....	564.	564.9	564.6	564.2	564.3	564.5	564.8	564.5	564.1	563.9
10.....	565.7	564.4	560.9	558.2	557.2	557.5	558.5	560.4	563.	564.6
11.....	565.8	561.9	562.	562.	562.	562.	561.9	562.	562.4	563.
12.....	562.3	562.2	562.7	566.7	566.5	567.6	567.1	567.1	566.9	567.1
13.....	552.1	551.2	550.8	551.7	551.2	550.4	550.	549.9	550.	561.
15.....	551.7	551.9	551.9	551.8	551.5	549.9	549.1	549.6	549.1	549.
16.....	556.1	557.1	556.	556.	555.	555.1	555.7	555.3	555.8	556.
17.....	556.1	559.8	558.3	556.	553.8	553.	552.8	552.8	555.	555.4
18.....	561.9	565.	565.4	564.7	565.	564.9	565.	564.9	564.8	564.6
19.....	564.7	565.	561.5	562.1	562.8	562.1	562.1	562.1	562.	562.
20.....	560.1	561.	562.7	562.9	562.9	562.7	562.9	563.4	563.6	562.
22.....	562.4	562.3	562.7	562.2	562.8	562.3	562.1	562.1	562.	562.
23.....	564.8	565.	565.2	566.2	566.7	566.3	567.1	567.	567.	566.6
24.....	.....	.....	565.9	566.3	566.7	566.6	566.5	566.9	567.	563.
25.....	.....	.....	564.	562.3	562.2	562.3	562.5	562.3	562.	562.5
26.....	565.7	565.3	565.	565.6	565.9	565.5	565.4	565.2	563.3	564.9
27.....	565.1	565.4	565.9	563.7	565.4	565.6	565.8	565.9	565.2	566.
29.....	567.	566.2	566.9	567.9	567.6	567.1	567.	566.8	565.4	566.1
30.....	569.	567.6	565.5	568.9	568.6	569.4	571.5	571.1	571.6	571.1
31.....	565.9	566.9	565.5	565.5	566.9	565.8	566.	566.1	566.8	567.6
Means.....	562.9	562.	561.8	562.1	562.	562.	562.8	562.9	563.	563.4

[1942.]

SECOND MAXIMUM OF DECLINATION.

August.]

	<i>h. m.</i> 18 00 12 19½	<i>h. m.</i> 18 06 12 26½	<i>h. m.</i> 18 12 12 31½	<i>h. m.</i> 18 18 12 37½	<i>h. m.</i> 18 24 12 43½	<i>h. m.</i> 18 30 12 49½	<i>h. m.</i> 18 36 12 55½	<i>h. m.</i> 18 42 13 01½	<i>h. m.</i> 18 48 13 07½	<i>h. m.</i> 18 54 13 13½
Aug. 1	556.9	556.5	556.2	555.9	556.	556.	556.	554.5	554.1	553.1
2	556.4	556.2	555.9	555.1	555.5	555.9	556.6	556.5	557.1	557.1
3 .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	554.3	554.1	553.2	553.	552.1	552.	552.	552.	552.1	552.2
5	556.	556.8	556.9	557.7	558.4	558.	557.7	557.	557.	556.8
6	551.7	552.2	553.6	553.1	553.8	555.4	556.	556.5	556.	554.5
7	551.	550.8	550.3	550.	550.	550.	549.6	550.	549.6	549.5
8	554.1	554.	554.8	554.3	554.	554.	554.	554.1	554.5	554.9
9	556.3	555.6	554.7	551.	554.	553.9	553.3	553.8	554.	554.
10	548.	546.3	545.6	546.	546.	546.	546.	546.	545.7	545.3
11	548.1	548.	547.9	547.	546.	547.	547.7	547.	546.	545.5
12	548.5	548.	547.	546.5	546.4	546.1	546.7	546.6	546.9	547.7
13	535.	533.5	531.3	530.6	530.4	528.7	529.3	528.9	529.1	531.
14	510.1	540.2	540.7	540.	539.3	539.9	539.9	539.4	539.2	539.1
15	542.8	542.2	541.9	542.2	542.	541.5	541.	540.3	540.	539.8
16	538.	537.9	537.9	538.	538.3	538.2	538.3	538.4	538.	538.
17	532.9	534.6	532.6	533.	531.8	531.	531.6	531.1	531.9	535.7
18	543.1	543.8	544.1	543.9	544.8	544.2	544.7	544.9	545.	545.
19	531.5	530.9	531.1	530.6	530.1	530.	529.2	528.9	527.	527.
20	549.3	548.5	548.1	548.2	547.1	547.	547.5	547.4	547.	546.2
21	548.3	547.4	548.	547.8	548.3	548.	548.7	548.6	548.	549.
22	554.6	554.2	553.5	553.7	553.7	553.	553.5	553.5	554.	553.5
23	550.7	550.3	550.7	551.	550.7	550.6	550.7	550.2	550.6	550.5
24	549.6	549.	548.	548.5	548.9	548.9	548.4	548.	548.7	548.4
25	555.	555.	555.2	555.3	555.4	555.5	555.5	555.6	556.	556.3
26	555.3	555.4	555.	555.	556.	556.	554.8	554.5	554.4	554.1
27	551.4	551.2	551.3	551.8	551.7	552.	552.3	552.1	552.	552.1
28	548.5	548.2	547.9	547.7	547.6	547.6	547.7	547.7	547.5	547.5
Means	548.5	548.2	547.9	547.7	547.6	547.6	547.7	547.7	547.5	547.5

[1842.]

FIRST MINIMUM OF DECLINATION.

Auerst.]

	<i>h. m.</i> 2 00 20 19½	<i>h. m.</i> 2 06 20 25½	<i>h. m.</i> 2 12 20 31½	<i>h. m.</i> 2 18 20 37½	<i>h. m.</i> 2 24 20 43½	<i>h. m.</i> 2 30 20 49½	<i>h. m.</i> 2 36 20 55½	<i>h. m.</i> 2 42 21 01½	<i>h. m.</i> 2 48 21 07½	<i>h. m.</i> 2 54 21 13½
Göttingen time										
Observatory time										
20 Aug. 1	556.9	557.3	557.7	557.7	558.	559.	560.4	560.	560.4	561.4
2	566.5	566.4	561.9	566.6	566.4	566.	565.9	565.8	565.9	566.1
3	563.	562.6	564.5	563.4	563.7	564.4	567.2	567.2	568.5	569.
4	569.7	566.2	566.	563.7	564.4	560.	575.7	576.4	575.9	573.2
5	566.	566.8	566.4	566.9	566.	565.	565.	565.7	565.8	566.1
6	564.1	563.3	565.	566.3	571.	574.	571.1	567.	565.2	564.7
7	567.7	567.2	566.	565.6	565.4	564.7	565.9	565.2	564.1	563.7
8	563.	561.7	560.9	561.	561.	560.8	560.7	561.5	561.	561.
9	563.8	562.	562.	562.	562.2	562.1	562.	562.1	562.	562.
10	557.	557.	555.9	555.3	555.9	558.7	558.7	557.6	557.6	560.
11	569.	568.7	560.1	564.9	571.1	570.2	567.5	563.5	561.	569.9
12	576.9	574.	572.8	571.9	574.	572.8	570.	568.	568.6	565.5
13	549.	548.8	549.	549.7	549.	549.	549.9	549.8	550.	549.8
14	559.2	558.6	557.	556.	554.8	553.8	552.7	552.2	552.2	551.7
15	555.6	555.8	555.5	554.9	554.6	555.	556.	555.7	554.7	558.
16	554.	555.5	555.	556.	556.8	556.5	556.9	556.9	556.6	556.7
17	558.6	557.2	558.4	558.6	558.6	558.2	558.	557.5	557.5	558.
18	570.3	570.4	568.3	567.8	567.5	568.	566.9	565.9	566.	565.9
19	578.8	578.8	560.6	560.9	561.	575.5	572.8	572.6	571.8	572.2
20	564.9	565.3	565.	564.7	565.	564.5	564.5	564.1	564.7	565.2
21	572.4	569.	570.9	573.2	575.	575.	575.3	573.7	571.5	568.7
22	568.	570.7	573.4	570.2	566.2	565.4	567.	568.7	569.	569.1
23	570.2	574.7	560.7	577.3	573.	571.7	575.6	573.5	573.1	573.4
24	565.2	565.7	566.	566.2	566.	566.3	566.5	566.4	566.3	567.
25	565.	565.5	565.4	565.6	565.7	565.5	565.7	565.4	565.3	565.6
26	563.	563.	563.	563.1	563.	563.2	563.1	563.	563.	563.
27	563.9	563.	563.	563.1	563.1	563.	563.2	563.	563.	563.9
Means	564.9	565.	565.3	565.2	565.	564.7	564.6	564.1	563.7	563.6

August.]

FIRST MINIMUM OF DECLINATION—Continued.

[1842.]

	<i>h. m.</i> 3 00 21 19½	<i>h. m.</i> 3 06 21 25½	<i>h. m.</i> 3 12 21 31½	<i>h. m.</i> 3 18 21 37½	<i>h. m.</i> 3 24 21 43½	<i>h. m.</i> 3 30 21 49½	<i>h. m.</i> 3 36 21 55½	<i>h. m.</i> 3 42 22 01½	<i>h. m.</i> 3 48 22 07½	<i>h. m.</i> 3 54 22 13½
Göttingen time.....										
Observatory time.....										
Aug. 1.....	560.3	560.1	559.3	558.9	558.9	559.6	560.2	562.2	563.2	561.3
2.....	565.9	566.	566.	566.	565.9	565.7	565.9	565.4	565.4	565.7
3.....	563.5	566.2	565.4	565.4	566.	565.4	566.3	566.5	567.4	568.4
4.....	574.2	575.5	574.3	573.	570.8	569.4	566.5	568.5	569.6	568.2
5.....	567.	567.5	568.1	567.9	565.8	566.4	567.9	569.6	572.	575.3
6.....	564.4	564.5	564.	563.8	563.5	563.1	563.3	563.9	565.	564.2
8.....	564.	564.6	564.1	564.1	565.	565.4	566.5	567.2	565.8	565.
9.....	561.1	561.	561.	561.1	561.1	561.1	561.4	561.4	561.1	561.8
10.....	562.8	562.9	562.3	562.9	563.1	563.4	563.2	563.4	564.	564.
11.....	563.6	563.9	563.1	561.6	560.9	561.6	561.4	562.	560.9	560.5
12.....	561.2	560.	558.1	557.2	557.	559.3	560.1	560.3	560.2	560.7
13.....	563.9	563.	562.3	561.9	561.2	561.8	561.8	562.	562.	562.
15.....	560.5	561.	562.2	563.5	562.3	562.1	562.1	562.2	562.5	562.1
16.....	551.9	552.1	552.8	553.	552.8	554.1	555.	555.	555.1	554.9
17.....	557.5	558.8	558.9	559.	559.2	561.2	560.9	561.9	560.6	561.1
18.....	566.8	558.5	567.7	558.	558.8	559.1	559.8	559.7	559.8	560.9
19.....	557.7	557.5	557.5	557.7	557.8	557.9	557.9	557.8	557.8	558.5
20.....	566.6	567.	566.3	565.4	565.6	564.6	563.8	563.1	562.6	562.3
22.....	571.8	572.2	572.3	572.5	573.	568.2	565.7	566.2	567.7	569.5
23.....	566.	565.8	565.4	566.	565.8	566.	566.4	566.5	567.1	567.5
24.....	566.9	566.2	566.5	565.8	566.	564.	564.	565.	565.	565.1
25.....	570.1	569.	569.3	568.6	569.2	568.9	569.	569.3	568.9	568.1
26.....	572.	569.	569.2	571.5	574.2	576.2	574.8	574.3	572.	571.
27.....	566.5	567.9	567.5	567.7	567.6	567.	567.	567.	566.9	566.3
29.....	566.7	566.5	565.7	565.6	565.9	565.6	565.6	566.1	565.7	566.4
30.....	563.	563.	563.1	563.3	563.5	565.	566.	565.9	565.7	566.1
31.....	563.7	564.1	564.3	564.4	563.5	563.5	563.4	563.	563.6	563.7
Means.....	563.6	563.8	563.5	563.5	563.5	563.5	563.5	563.8	563.9	564.1

Answer.]

MAXIMUM OF VERTICAL FORCE.

[1842.]

[97]

732

Aug. 1	h. m.	Therm., Fah.	h. m.	h. m.	h. m.	h. m.	h. m.	Therm., Fah.	h. m.	h. m.	h. m.	h. m.	h. m.
Göttingen time	22 04		22 10	22 16	22 22	22 28	22 34		22 40	22 46	22 52	22 58	
Observatory time	16 23½		16 29½	16 35½	16 41½	16 47½	16 53½		16 59½	17 05½	17 11½	17 17½	
Aug. 1	723.	70.9	723.3	724.	724.9	726.	726.	70.8	726.	726.9	727.1	727.3	
2	714.1	71.8	715.7	717.	718.	719.1	720.8	72.	721.9	723.	724.	725.2	
3	703.1	70.	704.	705.1	706.2	707.5	708.9	70.2	709.7	711.	712.2	713.	
4	693.8	69.8	694.	695.	696.1	697.4	698.8	69.7	699.5	701.	702.7	703.8	
5	684.9	68.9	685.	686.	687.1	688.4	689.8	68.8	690.5	692.	693.8	694.9	
6	675.1	67.5	676.2	677.3	678.4	679.5	680.6	67.9	681.7	683.	684.8	685.9	
7	665.4	66.5	666.5	667.6	668.7	669.8	670.9	66.8	672.0	674.	675.5	676.6	
8	655.7	65.5	656.8	657.9	659.0	660.1	661.2	65.9	662.3	664.	665.5	666.6	
9	646.0	64.6	647.1	648.2	649.3	650.4	651.5	64.9	652.6	654.	655.7	656.8	
10	636.3	63.6	637.4	638.5	639.6	640.7	641.8	63.8	642.9	644.	645.5	646.6	
11	626.6	62.6	627.7	628.8	629.9	631.0	632.1	62.9	633.2	635.	636.6	637.7	
12	616.9	61.6	618.0	619.1	620.2	621.3	622.4	62.1	623.5	625.	626.6	627.7	
13	607.2	60.7	608.3	609.4	610.5	611.6	612.7	61.4	613.8	615.	616.9	618.0	
14	597.5	59.7	598.6	599.7	600.8	601.9	603.0	59.9	604.1	606.	607.2	608.3	
15	587.8	58.8	588.9	590.0	591.1	592.2	593.3	59.1	594.4	596.	597.5	598.6	
16	578.1	57.8	579.2	580.3	581.4	582.5	583.6	58.4	584.7	586.	587.8	588.9	
17	568.4	56.8	569.5	570.6	571.7	572.8	573.9	57.1	575.0	577.	578.1	579.2	
18	558.7	55.8	559.8	560.9	562.0	563.1	564.2	56.4	565.3	567.	568.4	569.5	
19	549.0	54.9	550.1	551.2	552.3	553.4	554.5	55.1	555.6	557.	558.7	559.8	
20	539.3	53.9	540.4	541.5	542.6	543.7	544.8	54.8	545.9	547.	548.0	549.1	
21	529.6	52.9	530.7	531.8	532.9	534.0	535.1	53.8	536.2	538.	539.3	540.4	
22	519.9	51.9	521.0	522.1	523.2	524.3	525.4	53.1	526.5	528.	529.6	530.7	
23	510.2	51.0	511.3	512.4	513.5	514.6	515.7	52.4	516.8	518.	519.9	521.0	
24	500.5	50.5	501.6	502.7	503.8	504.9	506.0	52.1	507.1	509.	510.2	511.3	
25	490.8	49.8	491.9	493.0	494.1	495.2	496.3	51.8	497.4	499.	500.5	501.6	
26	481.1	48.1	482.2	483.3	484.4	485.5	486.6	51.4	487.7	489.	490.8	491.9	
27	471.4	47.1	472.5	473.6	474.7	475.8	476.9	51.1	478.0	480.	481.1	482.2	
28	461.7	46.1	462.8	463.9	465.0	466.1	467.2	50.8	468.3	470.	471.4	472.5	
29	452.0	45.2	453.1	454.2	455.3	456.4	457.5	50.4	458.6	460.	461.7	462.8	
30	442.3	44.2	443.4	444.5	445.6	446.7	447.8	50.1	448.9	450.	451.0	452.1	
31	432.6	43.2	433.7	434.8	435.9	437.0	438.1	49.8	439.2	441.	442.3	443.4	
Means	799.	78.5	799.5	800.1	800.8	801.6	801.9	78.4	802.6	803.1	803.9	804.3	
Reduced to 32° Fah.	161.9		162.5	163.3	164.2	165.1	165.6		166.5	167.2	168.2	168.8	

August.]

MAXIMUM OF VERTICAL FORCE—Continued.

[1842.]

Göttingen time.....	h. m. 23 04 17 23½	Therm., Fah.	h. m. 23 10 17 29½	h. m. 23 16 17 35½	h. m. 23 22 17 41½	h. m. 23 28 17 47½	h. m. 23 34 17 53½	Therm., Fah.	h. m. 23 40 17 59½	h. m. 23 46 18 05½	h. m. 23 52 18 11½	h. m. 23 58 18 17½	Therm., Fah.
Aug. 1.....	728.	70.8	728.7	729.	729.1	729.5	730.	70.8	730.	730.	729.7	730.	70.8
2.....	726.1	72.5	727.8	729.6	731.	733.	733.2	72.7	734.1	736.	736.8	737.5	72.9
3.....	723.1	76.	727.	727.	727.	727.	727.	76.	727.	727.3	727.4	727.7	76.
4.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
5.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
6.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
7.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
8.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
9.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
10.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
11.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
12.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
13.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
14.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
15.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
16.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
17.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
18.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
19.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
20.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
21.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
22.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
23.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
24.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
25.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
26.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
27.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
28.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
29.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
30.....	727.	70.5	727.	727.	727.	727.	727.	70.5	727.	727.3	727.4	727.7	70.5
31.....	727.	68.2	727.	727.	727.	727.	727.	68.2	727.	727.3	727.4	727.7	68.2
Means.....	804.7	78.3	805.1	805.6	806.	806.5	806.6	78.2	807.1	807.7	808.	808.1	78.2
Reduced to 32° Fah.....	169.4		170.2	171.1	171.9	172.8	173.3		173.8	174.4	174.8	174.9	

* Supplied.

[1843.]

MINIMUM OF VERTICAL FORCE.

Avevür.]

	<i>h. m.</i> 12 34 6 53½	Therm., Fah.	<i>h. m.</i> 12 40 6 59½	<i>h. m.</i> 12 46 • 7 03½	<i>h. m.</i> 12 52 7 11½	<i>h. m.</i> 12 58 7 17½	<i>h. m.</i> 13 04 7 23½	Therm., Fah.	<i>h. m.</i> 13 10 7 29½	<i>h. m.</i> 13 16 7 35½	<i>h. m.</i> 13 22 7 41½	<i>h. m.</i> 13 28 7 47½
Aug. 1	722.1	67.4	720.9	718.1	717.7	716.	713.7	67.3	710.6	709.3	708.7	708.3
2	651.	64.2	650.3	650.	649.1	648.3	648.6	64.3	648.6	648.	648.4	647.9
3	684.	66.8	680.	680.2	680.	680.	680.	66.7	679.3	679.	679.	678.8
4	715.5	69.	715.	714.	713.5	712.	712.	69.	711.3	711.	710.	710.
5	660.	64.	659.	668.	658.	656.5	656.	64.1	656.	656.1	655.5	653.1
6	670.5	66.	670.	670.	669.	669.	669.	66.	668.	669.	669.	669.9
8	755.	72.4	755.	755.	755.	755.	755.	72.4	755.	755.	755.	755.5
9	786.	74.5	786.	786.	785.	785.	783.9	74.6	783.5	783.	783.	781.7
10	780.	74.1	779.9	779.	779.	778.5	778.	74.	778.	778.1	778.9	779.
11	768.3	73.1	765.	765.	765.	764.7	765.	73.2	765.	764.2	764.1	765.
12	790.5	73.9	790.	789.1	788.5	789.	790.2	73.8	790.6	789.	789.	789.
13	777.	72.1	776.6	777.	776.1	776.	775.	72.1	775.	774.4	774.4	773.7
15	767.5	72.9	768.5	767.7	767.	767.	768.	72.7	766.	765.5	764.	764.
16	808.6	73.8	808.	808.5	805.6	805.	804.	73.4	803.	802.3	800.7	801.
17	806.	75.2	806.	806.	806.	806.	806.7	75.3	806.5	807.	807.	807.7
18	810.8	77.4	812.	811.7	812.	811.7	812.	77.5	812.	812.	812.1	813.
19	800.2	77.6	800.	800.2	800.	799.5	800.5	77.8	800.	800.	800.	800.
20	765.	74.8	764.5	763.7	763.9	762.2	761.7	74.8	761.	760.	759.8	759.
22	749.4	73.3	748.7	748.7	747.2	746.4	746.4	73.2	746.5	745.6	745.6	745.
23	743.2	71.7	742.5	742.	742.	742.7	740.4	71.8	740.5	740.5	740.3	741.9
24	730.	71.	730.2	730.	729.2	728.1	729.6	71.	729.9	728.9	728.4	727.1
25	742.9	75.2	742.6	741.8	743.6	744.6	745.	76.6	745.	744.4	745.3	744.9
26	769.5	77.8	768.3	768.3	768.	768.2	768.5	77.9	767.4	766.5	766.	765.8
27	779.3	78.	783.	783.1	784.6	782.4	782.5	77.7	781.8	780.8	780.	779.7
29	763.9	77.	764.	763.8	763.5	763.	763.	77.3	763.	762.7	763.5	763.5
30	745.6	74.4	744.1	743.7	743.3	739.9	738.7	74.5	738.4	738.3	738.3	738.1
31	688.6	69.8	688.8	689.	689.2	689.3	689.1	69.8	689.	688.8	688.6	688.9
Means	750.8	72.5	750.2	749.9	749.7	749.1	748.9	72.5	748.6	748.	747.9	747.8
Reduced to 32° Fah. . .	204.1		203.5	203.2	203.	202.4	202.2		201.6	200.8	200.4	200.

Augsr.]

MINIMUM OF VERTICAL FORCE—Continued.

[1842.

Göttingen time..... Observatory time.....	<i>h. m.</i> 13 34 7 53½	Therm., Fah.	<i>h. m.</i> 13 40 7 59½	<i>h. m.</i> 13 46 8 05½	<i>h. m.</i> 13 52 8 11½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 14 04 8 23½	Therm., Fah.	<i>h. m.</i> 14 10 8 29½	<i>h. m.</i> 14 16 8 35½	<i>h. m.</i> 14 22 8 41½	<i>h. m.</i> 14 28 8 47½	Therm., Fah.
Aug. 1.....	707.8	67.2	707.2	706.1	703.	703.1	703.6	67.2	703.	702.2	702.	701.8	67.2
2.....	648.	64.4	647.8	647.6	647.8	647.3	647.5	64.5	647.5	648.	648.	648.1	64.6
3.....	678.4	67.	678.	679.	679.9	679.6	679.9	67.3	680.	680.	681.	682.	67.5
4.....	709.	68.9	709.	709.	709.6	709.	709.	68.8	709.1	710.	710.	710.	68.8
5.....	652.7	64.3	652.	650.2	651.	649.7	650.2	64.4	650.4	650.5	650.5	650.5	64.5
6.....	670.	66.1	670.	670.	670.	669.5	669.6	66.2	669.5	669.5	669.5	670.9	66.3
7.....	755.	72.5	755.	755.	755.	755.	755.	72.6	755.5	756.	756.5	757.	72.8
8.....	741.5	74.8	741.	741.	741.1	741.1	741.4	75.	741.4	741.4	741.9	742.4	74.7
9.....	779.	73.9	779.	778.5	778.	777.2	776.5	73.8	776.7	776.	776.3	775.1	74.
10.....	766.	73.2	765.	764.5	764.	764.	763.1	73.3	768.2	763.	763.	763.	73.4
11.....	788.9	73.8	788.	787.9	787.	786.9	786.6	73.8	786.2	786.1	787.5	785.8	73.8
12.....	773.5	72.	772.	772.	771.6	771.2	771.1	72.	770.7	770.4	770.	770.5	72.
13.....	784.	73.8	783.2	783.	782.	781.5	781.	72.9	781.	780.8	780.5	780.	73.2
14.....	800.	73.6	799.5	799.	799.2	798.4	798.	73.7	798.	797.7	799.	799.	73.8
15.....	808.	75.4	808.	808.	808.	807.5	807.	75.4	807.5	807.	806.8	807.	75.5
16.....	812.3	77.7	812.5	812.5	813.	812.6	814.1	77.9	814.	815.3	816.4	816.7	78.
17.....	799.9	78.	800.4	800.2	801.2	807.5	800.1	78.2	800.	799.	798.5	799.4	78.5
18.....	759.6	75.	757.7	758.9	758.5	758.9	758.7	75.2	759.7	759.7	760.3	760.8	75.3
19.....	745.	73.5	745.	744.9	744.7	743.9	743.7	73.8	743.5	743.3	743.5	744.	74.
20.....	739.	71.9	740.	737.6	736.9	736.2	736.4	72.	736.9	736.1	735.8	735.9	72.1
21.....	727.2	71.	727.2	726.7	726.1	727.	727.3	71.	726.7	726.2	726.1	725.9	71.2
22.....	745.6	75.9	745.	745.5	746.4	747.8	747.7	76.2	748.9	749.3	750.8	751.3	76.8
23.....	796.	78.	795.7	794.7	794.	793.8	793.5	78.1	793.	793.4	793.3	793.5	78.3
24.....	779.7	78.	780.1	779.7	779.1	778.8	779.1	78.7	779.	780.	780.8	781.1	78.9
25.....	762.5	77.2	762.4	762.1	762.5	762.5	762.5	77.2	763.	763.	763.	763.6	77.4
26.....	798.1	74.	798.1	798.2	798.1	798.1	798.2	73.8	787.7	786.5	785.4	785.9	73.6
27.....	688.2	70.1	688.3	688.4	688.6	691.8	691.5	70.5	691.5	691.7	692.2	692.1	70.9
28.....	747.6	72.6	747.3	747.	747.	747.	746.8	72.7	746.9	746.8	747.	747.2	72.9
29.....	199.5		198.9	198.3	198.	197.7	197.1		196.8	196.2	196.	195.7	
30.....													
31.....													
Means.....													
Reduced to 32° Fah.....													

[1842.]

FIRST MAXIMUM OF HORIZONTAL FORCE.

Aveurs.]

Göttingen time.....	h. m. 11 32	Therm., Fah.	h. m. 11 38	h. m. 11 44	h. m. 11 50	h. m. 11 56	h. m. 12 02	Therm., Fah.	h. m. 12 08	h. m. 12 14	h. m. 12 20	Therm., Fah.
Observatory time.....	5 51½		5 57½	6 03½	6 09½	6 15½	6 21½		6 27½	6 33½	6 39½	
Aug. 1.....	713.4	66.4	717.2	717.1	716.4	717.5	716.5	65.8	716.8	715.7	713.7	65.7
2.....	669.7	63.	669.7	668.2	667.4	667.7	667.3	63.	666.2	666.5	666.9	63.1
3.....	686.8	65.8	686.9	684.1	684.	683.7	684.	65.8	684.6	684.	684.	65.8
4.....	685.6	68.3	686.	686.1	685.5	684.8	684.	68.3	685.	686.	686.	68.3
5.....	.....	64.	683.2	684.	684.3	685.	686.	63.9	681.2	676.5	678.	63.8
6.....	701.4	65.4	701.3	691.2	690.6	687.	684.7	65.5	684.9	680.5	678.2	65.4
7.....	711.5	72.	712.3	712.	713.	713.2	714.5	72.	715.	715.2	716.	72.
8.....	714.2	74.	714.5	716.1	716.2	716.	716.2	74.1	717.2	716.9	716.	74.2
9.....	708.4	73.7	709.7	710.6	709.2	709.7	710.5	73.6	710.2	711.1	710.7	73.7
10.....	706.	73.	706.6	706.	705.7	705.6	708.	72.8	708.9	711.3	711.3	72.6
11.....	686.	73.6	686.3	684.5	684.4	684.8	685.1	73.4	685.1	687.	690.	73.2
12.....	.....	71.9	697.	696.	697.4	697.6	697.3	71.7	697.6	698.5	699.	71.5
13.....	704.1	72.5	703.8	704.7	705.2	705.2	704.5	72.8	704.	704.7	705.5	72.2
14.....	702.9	73.5	703.5	702.	703.	701.1	701.6	73.4	702.	702.	703.5	73.3
15.....	.....	75.	707.	706.5	706.5	707.	711.	74.9	714.2	717.9	719.2	74.8
16.....	715.	77.	715.	715.	711.7	718.7	720.2	76.9	721.7	718.2	719.7	76.8
17.....	713.2	76.9	711.6	712.2	713.7	712.9	699.	77.2	691.4	691.	692.	77.5
18.....	708.	74.4	707.7	705.	709.	708.4	707.5	74.2	706.4	707.4	708.7	74.
19.....	695.1	72.9	694.2	692.2	692.	693.7	695.1	72.8	695.2	695.5	695.8	72.7
20.....	718.7	71.	712.7	720.	720.4	720.	726.1	71.4	721.9	725.	732.5	71.7
21.....	702.6	70.4	702.8	703.5	703.	705.5	704.7	70.3	714.5	712.4	710.6	70.2
22.....	730.	75.	732.7	735.	738.1	738.3	736.	75.7	.....	733.4	730.2	75.2
23.....	725.	77.9	734.	734.1	735.4	735.7	736.5	77.6	737.7	738.1	739.	75.2
24.....	731.	77.7	738.4	737.2	733.6	735.1	737.5	77.2	738.1	741.6	739.9	77.4
25.....	718.9	76.4	719.	717.6	717.5	717.4	717.2	76.7	717.4	718.5	718.5	76.7
26.....	721.7	73.7	720.9	718.9	716.7	715.5	713.	73.7	712.8	711.9	713.9	73.4
27.....	706.3	68.4	706.2	705.6	705.	705.	705.	68.7	705.	705.	705.	70.4
28.....	707.8	72.	706.	705.8	706.1	706.	705.9	71.9	704.9	705.9	706.	72.
29.....	602.9		602.	601.8	602.1	602.1	602.		601.3	602.	602.	
30.....	.....		.....	.....	.....	.....	.....		.....	.....	.....
31.....	706.3	68.4	706.2	705.6	705.	705.	705.	68.7	705.	705.	705.	70.4
Means.....	707.8	72.	706.	705.8	706.1	706.	705.9	71.9	704.9	705.9	706.	72.
Reduced to 32° Fah.....	602.9		602.	601.8	602.1	602.1	602.		601.3	602.	602.	

August.]

SECOND MAXIMUM OF HORIZONTAL FORCE.

[1942.]

	h. m. 21 02 15 21½	Therm., Fah.	h. m. 21 03 15 27½	h. m. 21 14 15 33½	h. m. 21 20 15 39½	h. m. 21 26 15 45½	h. m. 21 32 15 51½	Therm., Fah.	h. m. 21 39 15 57½	h. m. 21 44 16 03½	h. m. 21 50 16 09½	h. m. 21 56 16 16½
Göttingen time.....	684.4	69.	683.4	679.4	677.2	667.7	680.2	69.	689.	686.5	689.	681.5
Observatory time.....	700.5	70.	700.	696.9	699.7	699.	698.	70.4	698.5	697.4	696.3	697.2
2.....	.....	74.4	683.7	700.	696.7	696.1	698.2	74.7	692.5	708.	700.5	701.2
3.....	664.	70.3	689.7	671.	675.5	670.7	693.2	70.5	670.	672.5	667.	667.5
4.....	686.	67.	683.	695.7	685.2	680.5	679.	67.	660.3	667.9	660.	660.
5.....	715.5	74.2	719.6	727.5	736.6	741.5	737.	74.6	736.6	734.2	719.7	715.
6.....	701.4	78.	708.7	712.1	710.	707.3	704.6	78.5	706.	701.	698.5	697.1
7.....	722.4	77.2	721.4	720.7	720.7	720.	717.	77.4	709.2	715.5	719.2	715.5
8.....	708.1	76.5	707.4	709.	706.	702.5	702.4	76.6	701.5	701.	705.2	710.7
9.....	.....	78.	721.	721.7	720.5	720.9	719.3	76.1	720.2	719.	716.7	719.
10.....	711.2	76.	707.3	704.5	710.	704.	703.	76.	707.5	700.9	710.3	719.
11.....	699.9	74.4	698.7	698.5	697.	697.	698.1	75.	694.5	694.1	697.	696.7
12.....	706.	78.4	707.5	707.	706.5	707.7	707.7	78.9	710.6	709.5	706.2	705.2
13.....	698.	79.1	698.6	697.	699.2	703.9	703.	79.4	707.3	708.	707.5	708.7
14.....	706.7	79.	703.2	701.4	703.	694.1	697.5	79.2	696.2	711.9	702.7	707.2
15.....	707.7	83.2	708.7	705.7	707.7	702.2	699.	83.5	697.5	699.	696.3	700.3
16.....	680.	82.2	684.3	673.	696.4	705.6	698.2	82.2	678.4	694.6	671.2	687.
17.....	687.4	79.2	686.6	692.	699.7	693.6	684.4	79.5	682.2	684.3	701.5	723.2
18.....	737.1	78.2	734.5	733.3	735.2	737.1	739.6	78.5	741.7	740.7	741.	741.2
19.....	713.	76.9	714.8	713.	713.7	711.1	710.	-77.	710.1	713.	711.8	718.4
20.....	701.5	74.2	702.2	700.2	700.	708.2	716.1	74.5	708.7	707.2	716.	721.
21.....	736.9	81.	736.4	735.1	732.2	730.3	729.	83.3	726.	727.	726.7	736.6
22.....	733.2	83.	732.	729.5	733.	736.	739.4	84.	742.	731.2	731.7	733.9
23.....	725.5	83.6	729.7	724.3	726.	736.5	733.6	84.	731.6	719.5	718.9	720.
24.....	713.	82.	710.5	712.5	710.	715.2	724.	82.	730.5	722.3	731.2	730.2
25.....	719.2	76.5	721.	719.7	721.2	722.	723.4	76.8	724.5	725.1	725.1	724.9
26.....	716.3	76.4	716.4	715.2	717.	716.4	720.4	76.9	725.6	725.7	723.7	722.2
Means.....	707.	77.	706.9	706.9	708.7	708.5	708.	77.1	707.8	709.	708.6	710.6
Reduced to 32° Fah.....	590.		589.9	589.8	591.6	591.3	590.7		590.3	591.3	590.7	592.5

August.]

SECOND MAXIMUM OF HORIZONTAL FORCE—Continued.

[1942.]

[97]

738

Göttingen time Observatory time.	A. m. 23 03 16 21½	Therm., Fah. 16 37½	A. m. 23 09 16 37½	A. m. 23 14 16 33½	A. m. 23 20 16 39½	A. m. 23 26 16 45½	A. m. 23 32 16 51½	Therm., Fah. 16 57½	A. m. 23 38 16 57½	A. m. 23 44 17 03½	A. m. 23 50 17 09½	A. m. 23 56 17 15½	Therm., Fah.
Aug. 1.....	676.2	69.1	673.	676.5	682.5	685.2	689.2	69.2	679.5	680.7	682.9	681.	69.3
2.....	697.2	70.9	698.4	699.7	698.8	697.9	698.2	71.5	697.5	698.2	700.	701.	72.
3.....	699.7	75.	699.	699.4	699.5	709.5	703.2	75.4	697.5	698.5	705.7	711.	72.7
4.....	698.	70.2	671.2	671.	666.2	662.4	660.7	70.	670.	667.6	669.2	673.7	70.
5.....	686.8	67.	686.4	686.	687.	685.5	689.5	67.3	686.1	686.7	691.	692.	67.6
6.....	702.	75.	711.5	712.2	717.2	717.5	714.	75.	713.7	722.1	722.5	721.2	72.
7.....	694.7	78.8	697.	701.5	707.7	719.4	718.2	79.1	718.6	725.2	731.6	731.1	79.4
8.....	717.1	77.4	716.7	715.2	711.3	716.7	717.5	77.4	719.	721.2	722.7	722.2	77.4
9.....	717.7	76.4	716.7	717.	720.3	724.	726.2	76.2	725.2	726.5	728.5	728.8	76.
10.....	717.7	78.8	719.5	719.	718.	717.2	716.2	79.	718.2	716.2	716.	716.	79.2
11.....	728.6	76.2	728.7	721.	709.	712.1	712.2	79.2	709.8	708.	707.7	707.6	76.2
12.....	696.	75.3	694.7	693.9	693.	695.	694.7	75.7	698.	699.5	692.7	690.	76.
13.....	712.4	79.3	710.2	710.7	707.7	710.	710.2	79.8	715.	712.	714.4	714.2	80.1
14.....	710.5	79.8	710.	712.2	713.5	711.7	712.	80.	712.4	712.	714.	713.	80.2
15.....	705.7	79.6	706.2	707.1	703.9	709.	708.	79.8	707.	706.2	709.2	709.2	80.
16.....	704.1	83.8	705.8	711.2	714.	716.	721.8	84.2	726.9	724.7	720.7	721.2	84.1
17.....	699.8	82.5	697.5	698.	709.2	718.2	718.2	82.8	728.8	726.1	726.	726.5	82.
18.....	736.6	79.8	740.7	728.8	714.5	705.4	703.2	80.	701.7	704.7	715.9	721.	80.2
19.....	738.2	78.6	740.9	740.	743.	748.	748.2	78.6	752.4	755.2	756.7	760.	78.6
20.....	714.	77.	712.1	710.	711.6	712.2	709.7	77.	716.2	719.7	718.7	718.5	77.
21.....	711.6	74.7	702.3	702.	704.1	705.7	710.1	75.	721.1	722.2	722.	721.2	75.2
22.....	738.6	81.	743.	752.1	755.8	746.	745.2	81.2	741.8	750.	746.	746.5	81.4
23.....	732.5	82.7	746.	751.2	756.7	756.7	759.	84.2	736.8	747.5	752.2	753.	82.6
24.....	720.4	84.1	723.	727.7	737.	740.8	743.5	84.1	736.8	734.7	740.2	745.2	84.1
25.....	731.	82.9	736.	737.4	734.7	737.	734.7	82.	734.6	734.2	736.	735.	82.2
26.....	727.8	77.	720.8	732.	732.	735.	733.5	77.6	733.2	734.9	736.	737.	78.
27.....	725.1	77.2	724.6	723.7	724.4	724.	725.	77.5	724.5	724.7	722.	722.2	78.
28.....	711.6	77.5	712.4	712.8	713.4	715.5	715.6	77.7	716.6	717.4	719.9	721.6	77.8
29.....	593.3		594.	594.2	594.8	596.8	596.8		597.7	598.5	600.9	602.5	
Reduced to 32° Fah.....													

Means.....

[1842.]

FIRST MINIMUM OF HORIZONTAL FORCE.

August.]

Göttingen time..... Observatory time.....	h. m. 1 02 19 31½	Therm., Fah.	h. m. 1 06 19 37½	h. m. 1 14 19 38½	h. m. 1 20 19 39½	h. m. 1 26 19 40½	h. m. 1 32 19 51½	Therm., Fah.	h. m. 1 38 19 57½	h. m. 1 44 20 03½	h. m. 1 50 20 09½	h. m. 1 56 20 15½
Aug. 1.....	.....	70.	664.	683.7	686.3	687.4	685.7	70.	683.9	684.2	684.2	686.9
2.....	706.4	72.5	707.	708.9	713.1	708.	710.8	72.	712.	711.3	711.	709.5
3.....	.....	75.	.....	710.9	710.2	709.2	710.9	74.8	710.7	711.7	711.1	709.
4.....	667.2	69.8	.....	654.4	648.5	658.7	673.5	69.6	690.7	700.	703.7	702.4
5.....	723.4	68.	719.1	717.6	719.7	719.	715.5	67.9	712.2	709.5	706.4	705.
6.....	.....	74.3	.....	704.2	704.2	693.7	696.8	74.2	702.6	707.	706.	711.2
7.....	737.	78.5	733.1	736.5	743.3	742.7	746.8	76.2	747.2	751.	749.1	751.5
8.....	.....	78.	723.	732.5	730.7	730.2	719.7	77.9	719.	718.2	718.5	718.
9.....	.....	76.	738.1	737.2	728.	727.1	726.	75.8	725.2	725.2	725.2	724.3
10.....	737.9	78.6	733.7	735.6	723.7	723.2	723.5	78.5	723.2	725.7	726.7	727.4
11.....	725.5	75.6	717.2	717.7	718.	717.1	717.1	76.	716.2	715.4	715.5	712.7
12.....	713.4	75.	710.2	712.5	712.9	714.3	711.7	75.	714.6	714.3	715.2	716.2
13.....	724.	80.2	723.1	725.2	724.5	723.5	722.1	80.	723.8	723.2	723.2	724.7
14.....	712.9	79.4	713.	711.2	711.	713.	716.	79.	719.	718.	714.4	707.7
15.....	709.9	79.7	711.7	707.7	706.6	707.5	709.3	79.6	711.7	713.7	716.5	712.3
16.....	730.	84.1	729.3	729.1	731.2	731.	730.3	83.6	728.9	728.1	727.1	725.7
17.....	737.7	82.5	744.2	743.3	743.6	743.8	743.3	83.1	742.9	743.7	718.5	706.6
18.....	721.	80.	731.	723.3	721.8	721.	722.5	79.6	724.6	725.7	725.7	721.2
19.....	749.1	77.5	744.5	740.5	742.3	747.	740.9	77.1	744.	749.5	737.	758.5
20.....	736.7	76.1	736.9	737.7	738.3	737.2	737.7	75.6	737.8	737.8	738.7	737.8
21.....	744.	75.	732.5	721.4	715.5	711.9	724.7	74.9	723.8	720.7	717.4	727.6
22.....	752.9	81.	754.5	751.7	744.5	742.4	744.5	80.6	744.3	747.7	750.5	755.
23.....	758.2	84.	755.5	757.5	754.9	754.8	771.9	83.8	773.	763.2	765.8	765.7
24.....	747.5	83.6	749.2	750.	748.	747.	748.	83.	749.	748.8	750.	752.2
25.....	738.9	83.5	737.	737.	740.	740.4	741.	83.	737.5	736.9	736.7	736.6
26.....	730.3	77.6	730.	730.	730.7	731.	731.5	77.2	731.9	730.6	731.2	730.5
27.....	725.1	76.5	735.	723.9	723.7	724.	723.6	76.3	726.	724.3	724.7	724.5
28.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means.....	727.6	77.5	724.5	722.6	722.3	722.4	723.5	77.3	724.9	725.4	724.9	724.5

Avesar.]

SECOND MINIMUM OF HORIZONTAL FORCE.

[1842.]

Göttingen time..... Observatory time.....	A. m. 15 32 9 51½	Therm., Fah.	h. m. 15 38 9 57½	h. m. 15 44 10 03½	h. m. 15 50 10 09½	h. m. 15 56 10 15½	h. m. 16 02 10 21½	Therm., Fah.	h. m. 16 08 10 27½	h. m. 16 14 10 33½	h. m. 16 20 10 39½	h. m. 16 26 10 45½
Aug. 1.....	713.9	66.	711.	707.5	707.	705.	704.8	66.	703.	700.7	699.	697.
2.....	.....	65.	720.2	723.7	723.	723.8	723.8	65.2	722.8	720.8	718.9	717.3
3.....	725.2	68.	725.7	725.5	725.5	723.7	725.5	68.3	725.6	718.	724.4	723.2
4.....	730.7	68.	730.	729.5	728.2	727.5	726.7	68.	724.9	723.3	723.3	720.2
5.....	707.6	63.1	708.	713.2	715.5	713.8	708.7	63.2	712.7	710.4	711.6	711.6
6.....	.....	.....	.....	.....	.....	718.6	723.	68.4	721.6	726.9	732.	724.5
8.....	738.2	72.8	737.	739.2	739.2	736.8	736.5	73.	734.2	733.2	734.9	737.6
9.....	745.3	74.6	741.9	744.5	745.7	744.	741.3	75.	739.8	742.7	743.1	738.3
10.....	731.5	73.2	732.5	730.5	729.	728.5	725.5	73.2	722.7	722.	722.2	723.2
11.....	726.	73.	725.5	726.	726.4	725.7	724.	73.	724.3	725.1	725.6	726.4
12.....	726.3	73.	729.	726.5	.....	727.5	725.	73.1	723.3	726.9	727.9	728.3
13.....	720.2	71.2	719.	717.5	714.5	713.3	720.2	71.2	718.9	718.5	717.	717.7
15.....	736.1	73.2	735.7	736.1	737.	736.7	736.5	73.5	736.2	735.4	734.3	738.3
16.....	718.	74.7	717.	717.5	715.5	723.	716.	75.1	717.	715.	713.2	715.2
17.....	736.7	75.2	738.5	742.4	741.3	740.5	742.3	75.5	743.5	744.7	746.1	745.9
18.....	.....	78.	743.	745.7	747.7	741.	740.4	79.	739.3	741.9	739.	739.3
19.....	760.4	76.6	760.5	757.8	768.1	774.1	773.1	79.	785.2	786.9	785.6	781.7
20.....	731.5	75.4	728.6	727.	724.7	723.	722.8	75.7	722.3	721.	722.	719.
23.....	732.	74.2	731.6	732.6	730.1	727.7	731.3	74.6	728.7	727.9	725.5	726.
23.....	749.1	73.	751.	754.2	758.1	760.2	760.1	73.5	761.8	764.	762.3	762.5
24.....	.....	70.7	738.	727.	728.	725.1	728.4	71.	729.2	729.5	733.9	732.8
25.....	766.5	77.2	766.5	766.3	769.8	773.3	775.7	77.5	774.	776.	772.1	772.1
26.....	766.8	78.7	768.2	768.	767.	764.7	764.8	79.3	762.	761.	760.	766.
27.....	769.3	79.	767.8	767.3	767.	766.8	767.7	79.3	766.4	765.	764.8	762.5
29.....	771.2	77.2	770.8	768.6	767.	771.6	768.3	767.2	768.3	767.2	766.6	766.6
30.....	744.9	72.6	749.9	744.	745.1	745.8	740.2	73.8	741.4	739.1	747.9	746.
31.....	739.	71.1	738.9	739.	738.	736.5	736.9	71.4	734.5	735.5	733.7	732.3
Means.....	738.5	72.9	737.7	737.8	738.3	736.7	736.7	73.	736.4	736.3	736.4	736.2
Reduced to 32° Fah....	631.4	.....	631.1	631.1	631.5	630.3	630.1	.....	629.6	629.3	629.2	628.8

August.]

SECOND MINIMUM OF HORIZONTAL FORCE—Continued.

[1842.]

[97]

742

Göttingen time Observatory time	h. m. 16 32 10 51½	Therm., Feb.	h. m. 16 38 10 57½	h. m. 16 44 11 03½	h. m. 16 50 11 09½	h. m. 16 56 11 15½	h. m. 17 02 11 21½	Therm., Feb.	h. m. 17 08 11 27½	h. m. 17 14 11 33½	h. m. 17 20 11 39½	h. m. 17 26 11 45½	Therm., Feb.
Aug. 1	694.5	66.2	690.6	689.3	690.6	689.5	688.3	66.5	687.4	685.5	685.3	684.	66.7
2	717.9	65.5	718.1	716.7	715.7	713.6	714.6	65.9	712.6	710.8	708.	707.	66.3
3	722.6	68.8	721.3	720.5	720.8	721.4	721.4	69.2	719.7	717.9	716.1	714.3	68.9
4	719.1	68.3	717.1	715.2	716.8	703.	700.1	68.6	709.	707.2	705.2	703.5	65.
5	703.6	63.8	700.6	706.	712.3	711.	710.8	64.4	719.2	717.4	715.6	713.8	70.6
6	733.2	69.2	735.4	737.3	733.2	734.1	731.7	70.	719.2	717.4	715.6	713.8	74.2
8	735.1	73.4	736.9	736.1	733.7	731.7	732.	73.8	732.	730.7	728.	727.4	76.4
9	734.1	75.5	731.2	731.6	731.9	733.	731.4	76.	739.1	737.3	735.5	733.7	74.2
10	724.1	73.6	725.	727.	727.4	724.7	727.	73.9	725.	723.5	721.7	719.	74.
11	726.	73.2	726.	723.8	727.1	728.	728.9	73.6	728.6	726.8	725.0	723.2	73.7
12	729.	73.2	724.8	725.	726.1	726.7	725.2	73.4	724.8	723.1	721.3	719.5	72.5
13	716.	71.2	714.2	714.	713.8	715.2	715.8	71.8	715.1	713.3	711.5	709.7	72.5
15	733.2	73.8	732.5	733.2	731.1	727.4	726.8	74.2	725.6	723.9	722.1	720.3	74.6
16	713.	75.5	712.7	711.1	709.	708.2	707.3	76.	705.6	704.2	702.4	700.6	76.2
17	744.	76.	744.2	743.3	742.6	741.2	741.4	76.5	744.2	743.1	742.0	740.9	76.7
18	737.8	78.7	737.1	738.	741.5	741.3	739.5	79.1	732.1	730.5	728.7	726.9	79.4
19	778.	79.4	771.9	773.	763.	767.6	762.8	79.8	760.5	758.7	756.9	755.1	80.1
20	713.7	76.1	716.2	718.9	723.1	723.	720.5	76.5	721.	719.8	718.0	716.2	76.7
22	727.2	74.9	727.5	724.4	725.6	723.7	723.2	75.3	719.4	717.6	715.8	714.0	75.6
23	766.	74.	768.	769.2	769.	768.5	769.6	74.4	769.8	768.0	766.2	764.4	74.7
24	724.	71.1	727.2	741.5	746.8	760.9	758.2	71.5	757.7	755.9	754.1	752.3	71.8
25	766.1	78.2	763.	760.2	765.3	765.4	763.	78.7	752.5	750.7	748.9	747.1	79.
26	755.1	79.8	754.	754.5	753.7	754.	749.7	80.3	747.7	745.9	744.1	742.3	80.5
27	762.6	79.6	761.7	761.1	759.4	760.	759.7	80.1	761.	759.3	757.5	755.7	80.5
29	765.1	77.9	764.4	763.6	769.6	769.6	769.6	78.3	767.5	765.7	763.9	762.1	78.8
30	745.5	73.	746.2	745.1	743.1	742.4	740.8	73.5	738.1	736.3	734.5	732.7	73.8
31	732.1	71.5	730.5	729.9	730.3	730.7	730.2	71.9	730.2	728.4	726.6	724.8	73.3
Means	734.	73.4	733.3	732.	733.8	732.4	732.5	73.6	731.	729.3	727.5	725.7	74.3
Reduced to 32° Fah.	636.4		625.6	624.8	625.9	624.4	633.9		622.	619.9	617.7	616.	

[1842.]

FIRST MAXIMUM OF DECLINATION.

SEPTEMBER.]

	<i>h.</i> 6 00 0 19½	<i>m.</i> 6 06 0 25½	<i>h.</i> 6 12 0 31½	<i>m.</i> 6 18 0 37½	<i>h.</i> 6 24 0 43½	<i>m.</i> 6 30 0 49½	<i>h.</i> 6 36 0 55½	<i>m.</i> 6 42 1 01½	<i>h.</i> 6 48 1 07½	<i>m.</i> 6 54 1 13½
Göttingen time.....										
Observatory time.....										
Sept. 1.....	565.5	565.4	566.	565.9	565.6	565.	565.	565.	565.4	565.1
2.....	568.4	570.3	568.5	568.2	570.7	572.5	571.2	573.2	574.4	572.2
3.....	551.4	552.	553.9	561.7	560.5	560.	.....	559.	559.6	560.1
5.....	560.4	566.	.....	561.7	577.	575.1	574.	575.1	575.9	573.7
6.....	565.2	564.7	564.8	564.7	565.5	565.9	565.3	563.3	562.9	562.3
7.....	561.4	562.3	562.2	562.4	562.4	562.7	563.	563.1	563.5	563.
8.....	564.6	566.5	568.	568.9	568.6	567.8	568.2	568.2	568.6	568.1
9.....	564.7	564.6	564.5	564.4	564.6	564.8	565.	565.2	565.2	565.1
10.....	562.1	562.9	563.3	562.2	562.1	562.2	561.8	562.6	562.6	563.1
12.....	574.6	574.	573.	572.1	571.1	570.8	571.6	573.1	573.4	572.8
13.....	561.8	561.8	562.	563.1	563.3	563.3	565.	566.3	566.8	567.7
14.....	558.4	553.9	552.2	549.2	549.4	550.9	553.	555.8	558.	563.8
15.....	565.8	566.8	567.6	568.	567.9	570.7	565.5	565.8	567.	567.2
16.....	568.3	567.9	567.3	566.3	566.9	567.5	566.2	565.5	564.8	564.6
17.....	572.2	576.	580.3	584.	585.5	586.9	585.	582.4	580.6	579.7
19.....	568.9	569.	560.5	561.7	562.1	562.6	563.5	563.4	561.6	559.4
20.....	567.8	568.8	568.4	566.	566.3	566.6	566.1	565.4	565.5	567.
21.....	567.6	568.4	568.3	568.4	570.2	573.1	572.1	575.2	576.5	575.
22.....	569.7	564.4	568.6	569.8	563.2	561.2	562.5	560.8	560.8	561.5
23.....	566.6	567.4	570.7	574.4	576.1	577.8	578.3	577.5	578.6	578.5
24.....	579.3	579.3	579.	577.8	578.8	579.7	577.9	576.7	577.3	576.8
26.....	574.6	575.4	575.3	574.9	576.	576.5	577.1	577.3	576.5	576.1
27.....	578.	573.5	574.	573.9	573.9	574.9	575.9	576.7	577.6	578.5
28.....	570.1	569.8	568.6	567.5	567.9	568.	569.3	569.4	569.7	568.6
29.....	579.7	578.5	577.4	577.9	580.5	584.1	584.8	583.	581.1	580.3
30.....	570.2	570.1	569.9	569.6	568.3	571.3	570.1	569.4	569.8	570.2
Means.....	567.	567.3	567.7	568.4	568.6	569.3	569.5	568.4	569.4	569.2

[1842.

FIRST MAXIMUM OF DECLINATION—Continued.

SEPTEMBER.]

	<i>h. m.</i> 7 00 1 19½	<i>h. m.</i> 7 06 1 25½	<i>h. m.</i> 7 12 1 31½	<i>h. m.</i> 7 18 1 37½	<i>h. m.</i> 7 24 1 43½	<i>h. m.</i> 7 30 1 49½	<i>h. m.</i> 7 36 1 55½	<i>h. m.</i> 7 42 2 01½	<i>h. m.</i> 7 48 2 07½	<i>h. m.</i> 7 54 2 13½
Göttingen time.....										
Observatory time.....										
Sept. 1.....	565.3	565.7	565.	566.	566.1	566.1	566.2	565.7	565.6	565.2
2.....	571.7	570.6	568.	567.	577.5	580.7	585.2	581.4	579.8	571.7
3.....	561.5	561.3	560.6	560.	559.1	559.5	560.	559.1	560.2	560.2
5.....	571.9	570.1	567.9	566.	563.6	564.1	565.9	566.6	567.	566.
6.....	561.2	561.1	559.8	561.2	562.5	562.9	563.5	564.8	564.8	564.3
7.....	563.1	563.6	563.5	563.2	561.9	564.9	564.	567.	564.6	564.9
8.....	567.5	567.3	567.6	568.	567.2	566.8	566.4	567.4	568.3	568.2
9.....	565.3	565.6	565.7	566.	565.9	566.	566.1	566.2	566.2	566.2
10.....	563.5	564.7	565.7	565.2	563.8	564.8	564.4	564.5	564.	563.9
12.....	571.1	569.1	568.	566.4	566.3	566.8	568.2	569.	569.3	570.
13.....	568.4	568.2	.....	565.7	564.9	564.2	563.7	564.4	563.2	565.6
14.....	.....	565.	566.5	567.3	.....	569.2	569.4	568.7	568.8	568.8
15.....	567.9	567.9	567.9	568.3	568.	567.7	567.3	561.7	555.5	553.7
16.....	564.7	569.5	570.2	570.5	571.3	571.7	571.3	569.1	566.9	565.7
17.....	579.7	578.8	578.8	577.7	577.4	578.3	579.1	580.2	581.3	580.6
19.....	.....	556.8	557.8	559.2	561.8	564.2	566.4	567.5	566.7	565.2
20.....	568.8	569.	569.3	570.7	571.9	570.1	570.4	571.6	573.	572.
21.....	571.2	564.	563.4	568.4	565.7	565.8	565.8	567.6	561.5	568.1
22.....	563.7	565.	568.4	560.6	561.4	564.2	566.	565.8	585.2	565.9
23.....	580.4	586.5	586.8	586.5	581.2	578.6	578.6	574.1	571.6	572.5
24.....	576.9	577.6	578.	578.9	580.5	582.2	583.2	583.8	584.7	584.4
26.....	576.3	579.7	575.4	575.5	575.5	577.2	.....	*577.8	578.3	578.9
27.....	578.8	579.7	580.5	581.1	581.2	581.3	581.3	581.6	581.2	581.1
28.....	568.	567.3	568.7	568.8	568.3	568.	568.2	568.3	568.4	568.3
29.....	577.7	577.	576.1	576.2	576.3	577.7	578.8	578.9	579.2	579.9
30.....	570.1	570.6	569.5	569.3	568.6	567.1	564.1	561.6	561.1	562.6
Means.....	569.8	569.6	569.4	568.6	568.8	569.2	569.3	569.4	569.1	569.

* Two minutes late.

[1842.]

SECOND MAXIMUM OF DECLINATION.

SEPTEMBER.]

	<i>h. m.</i> 18 00 12 19½	<i>h. m.</i> 18 06 12 25½	<i>h. m.</i> 18 12 12 31½	<i>h. m.</i> 18 18 12 37½	<i>h. m.</i> 18 24 12 43½	<i>h. m.</i> 18 30 12 49½	<i>h. m.</i> 18 36 12 55½	<i>h. m.</i> 18 42 13 01½	<i>h. m.</i> 18 48 13 07½	<i>h. m.</i> 18 54 13 13½
Göttingen time.....										
Observatory time.....										
2 Sept. 1.....	549.	549.2	549.7	549.5	549.5	550.1	550.1	550.6	550.8	550.3
2.....	547.4	547.7	548.1	548.0	547.6	547.9	550.3	550.2	551.4	551.6
3.....	553.	553.1	554.	554.	554.	554.	554.1	554.9	555.	555.1
5.....	545.2	545.2	544.6	543.5	542.7	542.2	542.3	543.9	543.5	544.9
6.....	555.9	555.5	555.4	555.2	555.	556.	554.	554.3	554.3	554.1
7.....	548.	548.	548.2	548.	547.6	548.3	548.6	549.1	548.6	549.1
8.....	547.8	547.3	546.8	546.4	546.1	546.2	544.7	545.5	545.1	545.5
9.....	549.1	549.	549.4	.....	.....	549.	548.6	548.9	547.1	546.9
10.....	551.	550.9	550.	550.	550.	549.1	549.2	549.6	549.7	549.6
12.....	557.8	557.6	557.	555.4	556.7	554.2	553.8	553.5	553.3	553.3
13.....	555.	555.	554.5	554.2	554.1	554.3	554.1	554.5	554.5	554.7
14.....	557.2	556.9	557.1	557.4	556.9	556.9	556.9	557.2	557.	557.1
15.....	555.	554.8	554.8	554.5	554.	554.4	554.	554.	554.	554.
16.....	557.	556.4	556.1	556.	556.2	555.9	555.9	555.9	555.3	555.4
17.....	555.	554.9	555.2	555.1	555.4	555.4	555.2	554.6	555.1	551.7
19.....	556.5	556.1	555.9	555.4	556.	556.7	556.7	557.3	558.	558.
20.....	554.6	556.	554.8	554.	553.4	554.3	556.4	554.5	555.	555.2
21.....	554.6	554.5	554.2	553.5	553.6	552.7	552.	552.7	551.	550.4
22.....	559.5	559.3	559.2	558.	557.3	558.2	558.4	557.3	556.8	555.3
23.....	567.5	567.6	567.5	566.4	566.1	565.3	564.7	564.9	565.3	566.
24.....	571.1	570.5	570.8	570.5	571.	570.6	570.4	570.	568.8	568.6
26.....	577.	576.5	575.8	576.	575.3	575.4	575.1	574.7	573.7	573.7
27.....	572.5	573.	573.6	573.9	574.6	576.4	575.	575.1	575.	575.1
28.....	560.4	560.7	560.5	560.8	560.2	560.4	559.6	559.5	560.5	560.5
29.....	576.	577.2	577.5	578.	578.4	578.2	578.6	578.5	578.2	578.3
30.....	567.4	567.2	567.	567.2	566.7	566.5	566.	566.4	566.7	567.
Means.....	557.7	557.7	557.6	557.7	557.5	557.2	557.1	557.1	557.1	557.1

September.]

FIRST MINIMUM OF DECLINATION.

[1842.

[97]

746

	<i>h. m.</i> 2 00 20 19½	<i>h. m.</i> 2 06 20 25½	<i>h. m.</i> 2 12 20 31½	<i>h. m.</i> 2 18 20 37½	<i>h. m.</i> 2 24 20 43½	<i>h. m.</i> 2 30 20 49½	<i>h. m.</i> 2 36 20 55½	<i>h. m.</i> 2 42 21 01½	<i>h. m.</i> 2 48 21 07½	<i>h. m.</i> 2 54 21 13½
Göttingen time.....										
Observatory time.....										
Sept. 1.....	563.3	563.8	563.8	564.8	564.8	564.8	563.7	564.	563.	562.5
2.....	564.2	567.	570.7	574.3	581.2	585.2	582.	578.	576.4	575.
3.....	572.	573.2	573.5	573.4	571.6	568.4	568.4	570.	570.2	568.9
5.....	562.9	562.8	562.6	562.4	562.6	563.3	563.5	563.	563.1	563.
6.....	564.1	565.2	565.	565.2	564.3	564.8	565.1	565.8	566.5	566.
7.....	563.7	563.5	564.	564.5	563.7	564.	563.2	565.	563.8	563.5
8.....	567.6	565.5	564.1	564.2	566.	568.8	569.	568.9	569.	569.6
9.....	562.4	562.1	562.4	563.	562.	563.1	563.	563.8	562.	562.
10.....	559.5	559.	559.2	559.2	559.6	560.	560.	560.8	562.5	563.5
12.....	564.	561.	563.	564.9	565.	567.6	569.	571.	571.	571.
13.....	572.	569.	570.1	571.8	567.8	571.4	573.	571.9	572.	572.9
14.....	563.7	563.6	563.6	563.	562.3	564.9	562.6	562.6	562.9	563.
15.....	565.6	565.1	564.1	565.	563.5	563.8	564.1	564.	563.7	563.9
16.....	561.	563.2	563.7	563.3	565.7	568.1	568.2	568.	566.	566.
17.....	563.3	563.1	563.1	563.2	563.2	563.6	563.4	563.5	563.1	563.4
19.....	571.5	578.4	576.5	575.	581.	581.5	582.2	583.7	574.7	571.8
20.....	573.5	571.1	567.	563.5	563.8	563.8	563.2	563.5	565.2	565.2
21.....	576.4	573.	574.1	572.9	570.2	567.	567.6	567.5	565.5	564.3
22.....	582.7	584.9	579.2	573.9	572.1	571.2	570.9	570.	569.5	568.1
23.....	576.9	577.6	576.2	576.5	576.	575.1	575.	576.8	576.4	576.3
24.....	571.9	572.	571.6	571.6	571.6	571.2	571.1	570.8	570.8	570.3
26.....	569.4	569.5	569.	569.2	569.2	569.3	569.6	569.4	568.7	568.2
27.....	570.5	570.8	571.	571.	570.7	571.	570.5	570.4	570.3	570.
28.....	574.	570.8	568.4	567.	567.4	567.1	566.8	567.5	567.7	568.
29.....	577.7	575.	.....	.....	.....	.....	.....	.....	.....	.....
30.....	577.2	578.7	579.1	578.2	576.2	576.	576.6	576.2	575.9	575.1
Means.....	569.9	568.8	568.2	568.	568.2	568.6	568.5	568.6	568.	567.7

[1842.]

FIRST MINIMUM OF DECLINATION—Continued.

SEPTEMBER.]

	<i>h. m.</i> 3 00 21 19½	<i>h. m.</i> 3 06 21 25½	<i>h. m.</i> 3 12 21 31½	<i>h. m.</i> 3 18 21 37½	<i>h. m.</i> 3 24 21 43½	<i>h. m.</i> 3 30 21 49½	<i>h. m.</i> 3 36 21 55½	<i>h. m.</i> 3 42 22 01½	<i>h. m.</i> 3 48 22 07½	<i>h. m.</i> 3 54 22 13½
Gettengen time.....										
Observatory time.....										
Sept. 1.....	562.4	562.7	562.9	563.2	563.3	563.7	563.4	564.5	565.5	565.
2.....	575.7	569.2	568.4	567.8	566.7	567.	565.2	564.7	563.6	564.
3.....	567.3	569.1	567.9	567.3	567.9	568.6	569.1	569.2	569.6	568.6
5.....	563.6	563.	562.3	562.	562.1	561.7	561.7	561.9	562.5	562.4
6.....	569.1	565.	566.1	570.9	573.	573.4	574.9	576.9	574.3	571.3
7.....	564.5	564.7	567.	566.	566.	565.2	565.2	565.2	565.	565.
8.....	568.8	567.9	567.2	567.	566.4	565.5	564.9	564.7	564.8	564.9
9.....	*562.	561.9	561.7	561.7	561.8	561.9	562.	562.2	561.8	562.6
10.....	564.	563.5	563.8	563.	562.2	563.3	564.2	566.9	569.	569.
12.....	570.6	567.3	567.2	566.5	567.2	567.2	570.9	571.1	571.3	577.
13.....	573.8	570.9	571.2	573.2	571.9	571.5	569.9	567.9	570.6	572.5
14.....	563.	563.	562.9	564.	565.	564.4	563.9	564.	563.9	564.
15.....	564.1	564.2	563.7	563.7	563.6	563.6	563.9	564.4	564.6	563.6
16.....	569.3	569.2	566.8	565.8	560.2	557.8	559.3	561.	565.4	567.2
17.....	563.	562.8	562.6	563.	562.9	563.3	562.7	563.2	563.6	563.5
19.....	571.6	571.8	577.	574.9	573.1	569.8	568.7	570.	570.7	570.3
20.....	564.	561.7	564.3	563.6	563.4	563.1	563.7	564.4	565.2	565.9
21.....	565.5	566.7	566.2	565.6	565.1	565.6	566.	566.2	565.4	565.8
22.....	569.1	569.2	567.4	567.1	566.	566.2	566.2	567.2	567.1	567.3
23.....	576.	576.2	576.8	576.1	575.3	574.5	575.	575.	575.4	577.
24.....	570.7	570.7	570.2	570.3	570.6	571.	570.3	570.1	570.	569.6
26.....	563.	569.	567.3	568.5	568.8	569.	569.	568.6	568.2	567.9
27.....	569.7	569.2	569.7	569.6	570.	570.	569.3	569.	568.8	569.2
28.....	568.5	567.2	567.1	567.3	568.5	568.5	569.	570.	569.9	569.1
29.....	574.	573.5	573.5	571.9	569.3	569.3	569.1	569.6	569.7	566.5
30.....	572.	571.5	572.2	571.9	572.	571.5	572.8	573.5	573.2	573.2
Means.....	567.5	567.3	567.4	567.3	566.9	566.8	567.	567.3	567.6	567.7

• Two minutes late.

† One minute late.

[1842.

SECOND MINIMUM OF DECLINATION.

SEPTEMBER.]

	h. m. 13 00 7 19½	h. m. 13 06 7 25½	h. m. 13 12 7 31½	h. m. 13 18 7 37½	h. m. 13 24 7 43½	h. m. 13 30 7 49½	h. m. 13 36 7 55½	h. m. 13 42 8 01½	h. m. 13 48 8 07½	h. m. 13 54 8 13½
Göttingen time.....	576.4	576.5	574.5	574.1	573.7	573.4	572.8	572.8	571.9	571.9
Observatory time.....	571.5	573.3	576.5	576.3	574.9	574.3	573.7	573.7	578.1	578.1
Sept. 1.....	572.5	578.1	577.3	577.1	576.7	576.4	574.3	574.6	572.9	572.9
2.....	578.1	579.2	578.9	578.6	578.6	579.5	579.6	579.1	577.9	577.1
3.....	574.1	572.1	571.8	571.3	570.9	570.3	568.1	567.7	567.6	567.7
4.....	580.3	581.1	581.5	581.5	582.1	582.2	581.9	581.1	579.7	579.4
5.....	576.7	576.7	576.6	576.6	576.7	576.2	575.2	575.5	574.8	573.7
6.....	574.6	575.4	576.1	576.5	576.1	574.2	573.8	575.6	575.8	575.6
7.....	575.7	576.1	571.6	572.1	571.5	571.8	575.1	576.5	574.2	570.1
8.....	576.7	576.9	576.5	576.3	574.9	574.9	574.7	573.1	573.2	572.4
9.....	574.4	574.6	575.1	574.7	572.6	572.1	571.2	570.2	570.8	571.5
10.....	570.1	569.2	570.1	570.1	567.9	564.1	559.9	556.8	556.2	557.2
11.....	575.1	575.9	574.8	573.5	573.7	573.9	574.5	574.1	573.8	572.8
12.....	577.1	577.1	576.1	574.1	574.6	574.6	575.2	575.1	575.5	575.4
13.....	580.1	577.9	577.7	579.3	581.3	579.7	579.7	578.6	578.8	580.3
14.....	576.2	577.6	576.4	576.1	575.1	573.3	576.2	577.3	575.5	575.1
15.....	578.1	575.9	576.6	577.7	577.4	576.6	577.5	574.6	577.1	577.6
16.....	589.1	589.2	589.4	589.4	589.9	588.5	590.1	589.7	589.1	590.1
17.....	586.4	587.4	588.1	588.4	588.6	588.8	589.5	588.6	589.4	589.4
18.....	582.1	582.5	582.1	584.6	582.4	582.2	582.2	581.1	582.4	583.4
19.....	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1
20.....	569.1	570.1	571.1	569.7	569.5	568.7	568.2	569.8	569.8	570.7
21.....	579.2	580.1	579.5	580.2	577.1	576.8	575.9	576.3	577.1	578.3
22.....	574.2	574.8	574.7	575.1	575.4	575.7	575.2	574.1	574.1	574.1
Means.....	577.3	577.6	577.5	577.5	577.2	576.6	576.4	576.1	576.1	576.9

* Two minutes late.

SEPTEMBER.]

MAXIMUM OF VERTICAL FORCE.

[1842.]

	<i>h. m.</i> 22 04 16 23½	Therm., Fah.	<i>h. m.</i> 22 10 16 29½	<i>h. m.</i> 22 16 16 35½	<i>h. m.</i> 22 22 16 41½	<i>h. m.</i> 22 28 16 47½	<i>h. m.</i> 22 34 16 53½	Therm., Fah.	<i>h. m.</i> 22 40 16 59½	<i>h. m.</i> 22 46 17 05½	<i>h. m.</i> 22 52 17 11½
Göttingen time.....											
Observatory time.....											
Sept. 1.....	744.3	78.9	746.	747.	747.	747.2	748.	79.1	750.7	751.6	753.6
2.....	833.3	81.	831.1	832.5	833.7	834.2	834.	81.3	831.7	831.8	835.7
3.....	837.1	82.5	837.	837.3	837.	838.	838.	82.5	838.	838.	838.
5.....	807.2	79.5	807.2	804.8	800.	794.7	795.1	80.	801.	802.7	802.9
6.....	806.4	76.	805.1	804.1	803.7	803.6	804.3	76.	808.5	809.5	809.8
7.....	811.1	76.2	811.1	812.	812.	813.	813.1	76.9	810.	810.	810.1
8.....	851.	77.5	852.	850.5	851.2	851.6	851.7	77.3	850.8	851.	812.3
9.....	872.2	79.	873.	873.7	873.8	873.4	873.6	79.3	873.8	873.6	849.7
10.....	705.8	72.5	705.8	706.	706.7	707.	707.1	72.6	707.9	708.	874.1
12.....	869.2	85.	871.8	873.	873.	875.	876.5	85.2	876.9	877.9	708.
13.....	846.8	81.3	846.8	846.2	846.	845.	844.1	80.8	844.	844.1	880.
14.....	722.	70.	721.9	721.5	721.	721.	720.9	69.8	720.	720.	844.
15.....	690.6	69.9	691.	691.	691.	691.3	691.9	69.2	692.	692.	720.1
16.....	684.7	68.5	685.	686.	686.	686.	686.	68.6	687.	687.	844.
17.....	694.	69.1	694.7	695.6	696.6	696.8	697.4	69.2	698.	699.	692.9
19.....	763.2	76.8	764.4	767.	769.6	772.7	774.3	76.	777.2	779.7	700.
20.....	748.	72.	748.4	748.	747.6	747.	747.2	71.9	747.	747.	788.1
21.....	772.9	74.8	772.2	772.	772.	771.	770.1	74.3	770.	769.	745.4
22.....	749.	73.	748.5	748.7	747.	748.6	749.	73.5	770.	769.	768.
23.....	763.2	74.	762.	761.	760.	759.7	759.	74.8	750.	751.	752.5
24.....	804.7	78.3	804.5	805.	805.	805.	805.	78.	804.8	804.5	760.1
26.....	808.2	80.	808.	807.1	807.	806.5	806.	80.5	806.4	806.1	804.2
27.....	831.	80.	831.6	831.8	831.9	832.	832.9	80.5	833.	833.8	807.
28.....	737.1	74.	738.1	739.6	740.8	741.1	742.3	74.5	745.	746.	835.
29.....	836.5	79.5	836.	836.	835.4	835.4	835.1	79.2	835.	834.	747.
30.....	818.5	78.	818.1	819.	819.	817.8	818.7	77.6	819.1	819.5	834.
Means.....	784.9	76.4	785.2	785.2	785.1	785.2	785.4	76.8	786.	786.4	819.7
Reduced to 32° Fah.....	185.5		185.5	185.2	184.9	184.7	184.7		185.2	185.5	791.2
											186.4

[1842.]

MAXIMUM OF VERTICAL FORCE—Continued.

SEPTEMBER.]

Göttingen time..... Observatory time.....	h. m. 23 04 17 23½	Therm., Fah.	h. m. 23 10 17 29½	h. m. 23 16 17 35½	h. m. 23 22 17 41½	h. m. 23 28 17 47½	h. m. 23 34 17 53½	Therm., Fah.	h. m. 23 40 17 59½	h. m. 23 46 18 05½	h. m. 23 52 18 11½	h. m. 23 58 18 17½	Therm., Fah.
Sept. 1.....	754.	79.3	755.	756.	757.1	758.	758.7	79.1	760.	760.	761.	761.2	79.
2.....	831.6	81.4	831.3	831.	831.	832.	833.	81.7	833.9	840.	836.2	838.7	82.
3.....	837.	82.5	836.	837.	837.	837.	837.	82.3	837.	837.	837.	837.	82.3
4.....	800.7	80.	805.7	801.	798.	799.	799.	80.	799.	800.7	801.	804.	80.
5.....	816.7	75.9	835.2	810.3	809.6	811.	813.	75.7	812.5	813.	809.5	811.	75.5
6.....	812.7	77.	813.5	814.	814.5	816.1	816.5	77.	816.	816.6	816.3	816.9	77.
7.....	850.5	77.2	849.9	850.1	850.1	850.	850.	77.1	855.2	854.	853.1	853.	77.
8.....	874.9	79.5	876.	876.	877.5	877.8	879.	79.8	879.	879.	880.	880.	80.
9.....	708.	72.5	708.1	708.	708.	708.	708.3	72.5	708.4	709.	708.7	709.3	72.6
10.....	880.	85.5	881.	882.	883.	884.	885.	85.5	887.	887.	888.2	888.4	85.5
11.....	843.6	80.2	843.	842.	840.	839.	838.	80.2	837.5	836.2	836.	835.	79.2
12.....	719.2	69.7	719.2	719.	719.	719.	718.4	69.5	718.	718.	717.7	717.9	69.3
13.....	693.8	70.1	694.	694.	695.	695.	695.	70.	695.	695.	697.	696.6	70.
14.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15.....	700.	69.5	700.	701.	701.1	701.9	702.	69.5	702.	703.	703.6	704.6	69.5
16.....	793.4	80.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17.....	745.	71.7	744.4	744.1	743.	743.	743.	71.5	743.	741.1	741.	741.	71.2
18.....	767.	74.	766.	765.	764.	763.	763.5	73.3	761.	760.	759.	758.6	72.8
19.....	753.8	73.5	754.	755.	756.	757.	756.7	72.7	757.	756.	757.5	758.	72.
20.....	761.4	75.	763.	*764.4	764.	764.	766.	75.1	768.9	769.	768.7	770.7	75.3
21.....	803.5	77.	803.	802.	801.5	800.	799.5	76.7	800.	799.2	798.8	798.	76.3
22.....	807.1	78.1	808.	808.	808.2	809.	809.4	77.8	810.	810.	810.	810.1	77.5
23.....	835.5	80.4	835.8	836.	836.	836.	837.	80.1	837.	837.7	838.6	839.	79.8
24.....	749.	74.7	750.	751.	753.	754.	755.5	74.7	756.	753.	758.8	759.7	74.7
25.....	833.8	79.	833.3	833.	833.	*832.9	832.9	79.	833.	832.	832.	832.	79.
26.....	815.7	77.3	816.	816.	815.5	815.	815.	77.	814.7	815.	814.	814.	76.5
Means.....	791.5	76.8	792.5	791.5	791.5	791.7	792.1	76.5	792.5	792.7	792.7	793.1	76.4
Reduced to 32° Fah.....	186.6		189.5	188.9	189.3	189.9	190.8		191.7	192.3	192.7	193.6	

* One minute late.

[1942.]

MINIMUM OF VERTICAL FORCE.

SEPTEMBER.]

	h. m. 12 44 6 53½	Therm., Fah.	h. m. 12 40 6 59½	h. m. 12 46 7 05½	h. m. 12 52 7 11½	h. m. 12 58 7 17½	h. m. 13 04 7 23½	Therm., Fah.	h. m. 13 10 7 29½	h. m. 13 16 7 35½	h. m. 13 22 7 41½	h. m. 13 28 7 47½
Gottingen time.....	699.3	71.2	698.4	698.7	697.6	697.3	696.9	71.3	697.	697.	696.8	697.
Observatory time.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sept. 1.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2.....	766.	76.	767.5	769.9	773.9	777.8	779.5	76.	779.9	779.	778.	777.2
3.....	764.8	75.	764.4	763.8	763.	762.3	762.2	75.	762.3	762.6	763.1	763.3
5.....	780.9	73.	784.6	786.	788.3	788.6	792.7	73.2	802.9	803.2	803.7	802.9
6.....	723.4	68.8	726.3	729.3	734.9	736.4	734.8	68.8	734.7	734.5	734.2	734.1
7.....	801.2	71.1	801.3	801.4	801.6	802.	802.2	71.3	802.6	802.	801.5	801.
8.....	837.5	75.	838.	838.2	837.9	837.9	838.	75.1	838.	838.5	839.	839.1
*10.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12.....	767.8	74.9	771.2	771.4	771.2	771.4	775.8	75.2	769.6	769.6	770.7	771.5
13.....	822.	78.8	822.	821.9	821.1	819.4	819.3	78.8	819.3	818.1	818.	818.
14.....	752.2	71.4	751.9	751.4	750.5	749.9	749.5	71.4	749.	748.5	748.2	747.6
15.....	685.	67.4	685.	685.	685.	685.	684.7	67.3	684.2	683.8	683.2	682.9
16.....	682.4	67.	682.	681.4	680.8	680.2	679.7	66.9	679.6	679.1	679.	677.4
17.....	659.5	63.7	659.2	658.2	657.1	656.6	656.1	63.7	655.	654.2	654.	653.5
19.....	851.5	63.4	851.	850.5	850.	850.	850.	63.4	850.	849.	849.	849.
20.....	824.5	76.5	824.	823.4	822.9	822.6	821.4	76.5	821.1	820.7	820.9	820.
21.....	775.	74.1	775.	775.2	776.2	776.4	777.1	74.2	776.5	776.3	776.1	775.9
22.....	800.6	75.7	800.2	800.	799.6	799.2	798.5	75.4	798.7	798.6	798.1	797.4
23.....	752.	69.8	752.	752.	751.6	750.5	747.4	69.8	745.5	744.5	743.9	743.8
24.....	755.7	71.3	755.1	755.	755.	755.	755.	71.4	754.3	754.1	750.	749.7
26.....	785.3	72.2	783.9	782.1	780.6	778.8	778.5	72.	777.6	775.7	773.4	774.
27.....	780.8	74.6	781.5	783.3	784.6	786.	786.2	74.4	788.2	787.1	786.2	785.6
28.....	684.3	65.3	683.7	682.8	681.9	681.6	681.2	65.1	679.9	677.3	675.8	675.
29.....	835.	78.2	835.	836.	836.	836.	836.	78.7	836.	836.2	836.1	836.4
30.....	825.5	77.8	825.2	825.4	826.1	826.9	827.	78.2	827.2	827.4	827.9	828.5
Means.....	758.8	72.2	759.1	759.3	759.5	759.5	759.6	72.2	759.5	758.8	758.3	758.

SEPTEMBER.]

MINIMUM OF VERTICAL FORCE—Continued.

[1842.]

[97]

752

Göttingen time. Observatory time.	<i>h. m.</i> 13 34 7 53½	<i>h. m.</i> 13 40 7 59½	<i>h. m.</i> 13 46 8 05½	<i>h. m.</i> 13 52 8 11½	<i>h. m.</i> 13 58 8 17½	<i>h. m.</i> 14 04 8 23½	Therm., Fah.	<i>h. m.</i> 14 10 8 29½	<i>h. m.</i> 14 16 8 35½	<i>h. m.</i> 14 22 8 41½	<i>h. m.</i> 14 28 8 47½	Therm., Fah.
Sept. 1	696.2	696.2	695.5	695.5	696.4	695.6	71.5	696.7	697.1	697.	696.7	71.8
2	.....	.....	.....	757.3	757.2	756.8	73.2	758.1	758.7	759.1	761.	73.7
3	777.9	777.1	776.7	776.7	774.7	776.1	76.3	778.5	779.	778.9	773.7	76.7
5	763.6	763.7	763.3	763.3	763.7	763.6	75.5	763.6	763.9	764.1	764.4	75.8
6	802.4	802.	801.6	801.6	800.4	799.7	72.8	799.1	798.5	796.9	795.8	72.5
7	734.	734.3	733.6	733.5	733.	733.	68.9	733.	733.	733.	732.5	69.
8	800.7	797.8	800.2	800.	800.	800.2	71.7	800.	800.1	800.	800.7	72.
9	839.6	839.3	839.7	839.6	839.6	840.4	75.4	840.2	840.6	841.	841.	75.5
*10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12	773.	769.2	767.7	771.3	771.4	770.9	75.9	766.2	768.	768.1	769.	76.5
13	818.	817.9	817.3	816.2	815.8	816.	78.8	815.3	815.1	815.6	815.9	79.3
14	747.	746.5	746.1	745.8	745.5	744.7	71.3	744.8	744.	744.	743.8	71.3
15	682.9	683.	682.6	682.6	682.1	682.3	67.2	682.	682.	682.	681.7	67.4
16	677.1	677.2	677.6	677.9	677.7	677.8	66.8	677.2	677.	676.7	676.4	66.7
17	653.5	652.9	652.9	652.5	652.8	653.	64.5	653.1	653.	653.1	653.	64.5
19	649.	649.	649.	648.5	648.	648.	63.5	648.	648.	648.9	648.1	63.5
20	819.8	818.8	818.5	818.3	818.7	818.2	76.5	817.8	817.6	817.	816.6	76.5
21	776.8	774.4	778.3	779.1	780.4	781.	75.2	781.8	782.7	784.3	785.1	75.8
22	797.6	797.1	797.5	797.2	797.2	796.8	75.	796.7	796.5	797.	796.5	75.
23	733.5	733.9	733.8	733.7	735.	738.2	71.5	737.	737.7	738.8	739.5	72.5
24	749.5	750.1	750.1	749.	748.	746.7	71.	745.2	744.	743.5	743.2	72.3
26	772.9	772.5	771.8	771.5	771.5	771.4	73.7	771.7	772.	773.2	774.	74.4
27	785.	784.8	785.2	784.7	784.8	785.1	75.7	785.9	786.4	787.3	788.2	77.1
28	674.4	673.3	672.6	672.1	670.7	669.	65.	669.7	668.1	669.	668.8	64.8
29	836.4	836.6	836.6	837.	837.6	838.	79.3	838.	838.	838.2	839.	79.5
30	829.3	830.1	831.	831.6	831.3	832.4	78.8	832.8	833.4	833.8	834.2	78.8
Means	757.9	757.6	757.5	757.5	757.3	757.4	72.7	757.3	757.4	757.5	757.5	72.8
Reduced to 32° Fah.	213.1	211.9	210.9	210.	208.8	208.		207.6	207.4	207.1	206.7	

* Spider's web attached to the mirror.

† Supplied.

‡ Two minutes late.

[1942.]

FIRST MAXIMUM OF HORIZONTAL FORCE.

SEPTEMBER.]

	h. m. 11 32 5 51½	Therm., Fah.	h. m. 11 38 5 57½	h. m. 11 44 6 03½	h. m. 11 50 6 09½	h. m. 11 56 6 15½	h. m. 12 02 6 21½	Therm., Fah.	h. m. 12 08 6 27½	h. m. 12 14 6 33½	h. m. 12 20 6 39½	h. m. 12 26 6 45½	Therm., Fah.
Göttingen time.....	712.6	70.5	712.8	713.3	713.4	713.8	715.	70.4	716.3	716.9	718.	718.3	70.4
Observatory time.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sept. 1.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2.....	745.	77.2	740.	738.8	737.9	736.1	733.4	77.2	734.9	737.3	739.8	740.9	77.2
3.....	718.2	74.4	718.5	718.5	719.	719.4	721.	74.6	723.	724.	724.7	727.2	74.6
5.....	762.	72.6	769.4	757.7	754.7	752.5	747.1	72.7	745.4	744.3	744.1	743.7	72.7
7.....	720.5	67.8	720.3	720.	720.	720.3	720.6	67.7	722.1	722.8	723.8	726.1	68.2
8.....	723.5	73.7	722.3	721.	721.	721.	721.	73.7	721.	721.	723.8	726.8	73.7
9.....	737.	74.5	*735.1	734.5	734.7	734.3	733.8	74.5	735.9	734.2	730.3	729.1	74.7
10.....	741.2	70.8	740.6	740.3	739.3	738.5	737.7	70.8	739.	740.6	743.4	744.6	70.8
12.....	.....	.....	.....	.....	.....	.....	726.6	74.7	728.	728.7	731.4	733.4	74.5
13.....	759.5	73.4	757.2	756.3	758.8	752.8	753.8	78.4	751.4	755.7	754.4	753.	78.2
14.....	751.5	70.8	751.5	751.6	750.4	749.2	748.4	70.3	751.1	751.3	751.9	753.1	70.
15.....	716.9	66.5	716.7	716.3	716.1	715.6	715.2	66.5	715.2	715.7	715.5	716.	66.5
16.....	718.3	71.6	717.8	717.5	718.5	717.9	717.7	68.2	718.	718.1	720.	723.	66.8
17.....	709.4	62.8	709.1	708.5	708.2	707.8	707.6	62.8	707.2	707.	707.	707.2	62.6
19.....	701.0	63.	701.2	701.2	703.2	704.8	706.1	62.8	707.1	707.	708.1	.....	62.7
20.....	698.7	71.8	699.6	697.5	698.2	698.2	699.7	71.7	698.9	701.	703.3	709.5	71.5
21.....	683.2	69.	687.5	688.6	691.2	693.5	696.6	69.1	689.2	704.	709.5	714.8	69.3
22.....	688.6	70.6	688.9	689.6	683.2	680.2	678.3	70.7	676.9	675.8	674.7	695.1	70.4
23.....	683.2	65.8	684.5	684.9	689.6	690.7	691.8	65.7	692.4	693.4	693.4	695.1	65.7
24.....	682.5	67.3	679.1	679.4	681.2	681.1	683.5	67.7	681.9	684.8	686.9	688.7	67.6
26.....	738.6	69.4	740.6	743.	740.9	742.4	744.1	68.8	743.9	745.9	746.2	746.8	68.4
27.....	747.8	69.	748.	749.2	750.2	753.2	754.5	69.5	753.9	752.2	752.1	753.8	70.
28.....	739.	64.6	739.	739.5	739.6	740.1	739.1	64.5	738.7	738.6	737.9	737.8	64.4
29.....	.....	74.2	.....	750.5	744.2	741.5	740.	74.2	750.8	750.5	751.5	*752.	74.2
30.....	.....	73.8	751.6	747.3	742.6	744.1	740.8	73.8	739.2	737.7	735.3	734.	73.8
Means.....	722.2	70.5	723.1	724.	723.1	722.9	722.9	70.6	723.6	724.3	725.2	*727.	70.4
Reduced to 32° Fah.....	627.	.....	627.4	627.8	626.9	626.7	626.4	.....	627.2	628.	629.	630.9	.....

* One minute late.

[1842.]

SECOND MAXIMUM OF HORIZONTAL FORCE.

SEPTEMBER.]

	h. m. 21 02 15 21½	Therm., Fah.	h. m. 21 08 15 27½	h. m. 21 14 15 33½	h. m. 21 20 15 39½	h. m. 21 26 15 45½	h. m. 21 32 15 51½	Therm., Fah.	h. m. 21 38 15 57½	h. m. 21 44 16 03½	h. m. 21 50 16 09½	h. m. 21 56 16 15½
Göttingen time												
Observatory time												
Sept. 1	714.2	77.2	715.2	716.	719.7	722.4	723.4	77.7	720.8	721.	721.	720.
2	*769.	78.5	769.7	766.8	757.8	758.7	741.2	78.5	756.	743.2	749.	735.2
3	737.7	80.7	734.7	736.	734.	736.	729.8	81.	729.	735.2	740.7	741.7
4	758.4	79.	762.	767.6	756.2	756.	752.2	79.2	749.6	746.4	741.2	740.
5	731.	74.	730.3	730.2	729.3	729.3	726.	74.2	725.9	723.9	725.	726.
6	711.9	75.	732.3	730.2	729.2	724.2	728.5	75.5	725.2	729.5	727.5	731.1
7	731.8	76.7	733.2	734.6	737.6	736.	736.	76.9	735.5	733.9	732.9	732.9
8	778.	78.8	781.4	791.1	788.8	780.5	770.8	78.8	761.6	756.	756.9	765.
9	745.4	71.2	744.7	747.6	747.2	743.6	742.	71.3	738.	737.4	739.6	742.4
10 .....	.....	84.	757.7	757.	756.5	757.5	762.4	84.3	760.	770.2	771.4	776.5
11	762.	81.	768.	759.2	752.	755.3	755.	80.7	755.4	757.	756.	757.2
12	737.5	68.9	739.	736.	735.	735.	739.5	68.8	738.9	739.	738.	734.2
13	736.9	69.1	738.5	739.	738.8	738.4	739.8	69.4	737.5	737.7	738.5	740.5
14	723.2	67.4	725.2	725.4	727.9	728.7	728.8	67.8	727.5	727.7	729.	729.1
15 .....	.....	67.6	731.5	724.7	723.	722.2	717.3	67.8	723.	724.	723.7	721.4
16	702.5	70.5	714.2	719.7	708.6	717.7	719.	71.5	697.3	698.5	673.7	677.
17	736.	69.	734.8	733.5	726.3	720.9	719.5	69.1	716.3	717.5	721.5	718.7
18	719.5	73.2	715.9	709.3	713.9	719.5	722.8	79.1	719.2	719.3	719.1	719.2
19	707.4	68.1	694.7	700.	696.5	700.	699.	68.2	695.	686.8	690.	690.2
20	684.2	70.	689.5	685.8	683.5	690.	701.	70.	692.2	695.7	692.	700.
21	691.7	74.2	696.8	696.3	698.	698.7	700.7	74.3	699.7	697.2	700.	700.
22	758.7	74.9	759.4	757.7	758.	758.7	757.7	74.8	755.	752.2	753.6	753.
23	769.7	76.8	768.5	767.8	769.7	770.2	772.3	77.2	773.2	773.7	774.	776.2
24	746.	71.4	744.2	743.2	747.7	748.2	748.2	74.2	747.2	744.7	747.	743.2
25	768.8	77.5	768.2	769.4	771.7	770.7	770.	77.5	771.1	771.	774.	775.
26 .....	.....	75.2	761.8	759.2	759.5	756.5	760.	75.8	762.6	763.3	762.7	764.7
27												
28												
29												
30												
Means	735.7	74.2	738.1	737.8	736.8	737.	737.	74.4	735.1	734.3	734.5	734.6
Reduced to 32° Fah...	630.7		632.5	632.1	631.	631.1	631.		629.	628.1	628.1	628.1

* One minute late.

SEPTEMBER.]

SECOND MAXIMUM OF HORIZONTAL FORCE—Continued.

[1842.

Göttingen time. Observatory time.	<i>h. m.</i> 22 02 16 21½	Therm., Fah.	<i>h. m.</i> 22 08 16 27½	<i>h. m.</i> 22 14 16 33½	<i>h. m.</i> 22 20 16 39½	<i>h. m.</i> 22 26 16 45½	<i>h. m.</i> 22 32 16 51½	Therm., Fah.	<i>h. m.</i> 22 38 16 57½	<i>h. m.</i> 22 44 17 03½	<i>h. m.</i> 22 50 17 09½	<i>h. m.</i> 22 56 17 15½	Therm., Fah.
Sept. 1	724.2	78.2	726.2	725.2	726.2	729.2	728.3	78.8	726.8	727.7	729.5	728.5	79.3
2	734.4	80.	740.4	750.	756.4	763.2	754.	80.6	750.	754.	759.	763.6	81.
3	741.1	81.5	741.2	744.2	753.	753.5	757.7	81.6	749.7	750.	752.	753.7	81.7
5	740.	79.5	745.2	732.8	732.	736.	736.	79.8	742.	744.5	746.	746.2	80.
6	729.3	74.5	731.1	732.5	736.	737.8	740.2	74.7	738.7	736.5	740.5	735.6	74.9
7	729.2	76.	740.5	736.2	731.	732.	733.5	76.5	732.4	734.4	728.5	731.4	77.
8	734.8	77.	734.	734.8	736.1	738.7	729.7	76.9	725.5	726.1	727.6	730.7	76.8
9	758.	78.9	762.2	763.3	761.2	760.2	761.	79.	762.1	760.	761.	761.	79.1
10	744.	71.4	744.7	744.4	746.4	751.9	757.1	71.5	762.8	760.5	756.4	751.	71.7
12	778.7	84.8	787.6	774.5	772.	782.2	786.2	86.	774.9	768.3	780.	782.	86.2
13	760.	80.	760.	763.7	759.5	756.2	771.5	79.6	760.1	772.9	773.5	781.	79.3
14	732.	68.7	735.	735.	733.7	733.	733.	68.7	732.	732.1	732.9	733.	68.7
15	740.	69.6	739.	741.6	743.7	745.8	749.2	69.6	747.5	747.5	747.9	747.	69.6
16	724.2	67.8	724.5	725.7	728.6	729.5	729.5	67.8	731.6	731.6	731.	728.	67.8
17	721.	68.	725.9	729.4	732.	730.1	731.	68.	732.5	731.	726.4	725.	68.
19	686.7	72.5	687.7	706.7	711.7	704.7	712.7	73.6	715.	725.	726.2	727.	74.5
20	730.	69.2	728.5	725.4	724.7	726.	726.	69.2	721.	719.	717.7	716.	69.3
21	721.5	72.8	723.3	726.4	739.	738.3	740.5	72.5	743.	744.6	750.	746.7	72.
22	686.	68.5	703.2	720.6	703.2	697.5	692.7	69.8	706.2	696.2	702.	711.	69.8
23	694.7	70.	698.7	699.5	696.	697.7	703.7	70.1	692.5	700.	704.	706.	70.1
24	700.2	74.2	703.	698.2	696.5	695.5	698.2	74.	695.	696.1	699.5	696.5	74.
26	752.3	74.7	753.5	763.7	756.	759.5	760.	75.	758.7	759.7	761.	761.	75.3
27	773.5	77.5	773.5	775.2	774.5	772.	774.5	78.	776.	778.7	781.	780.	78.4
28	744.7	72.8	745.5	748.5	752.2	760.	766.5	73.5	775.5	780.2	781.5	779.6	74.
29	773.2	77.3	773.5	774.	773.2	771.7	772.7	77.2	775.5	773.	.....	773.5	77.1
30	763.5	75.5	764.2	771.	772.	769.2	771.2	75.4	779.5	783.	787.5	788.3	75.3
Means	735.4	74.6	738.2	739.7	740.3	741.1	742.9	74.9	742.6	743.6	744.1	745.5	75.
Reduced to 32° Fah.	628.8		631.5	632.9	633.4	634.	635.8		635.4	636.3	636.9	638.	

[1842.]

FIRST MINIMUM OF HORIZONTAL FORCE.

SEPTEMBER.]

Göttingen time	h. m.	Therm., Fah.	h. m.	1 08 19 27½	h. m.	1 14 19 33½	h. m.	1 20 19 39½	h. m.	1 26 19 45½	h. m.	1 32 19 51½	Therm., Fah.	h. m.	1 38 19 57½	h. m.	1 44 20 03½	h. m.	1 50 20 09½	h. m.	1 56 20 15½
Observatory time	19 21½																				
Sept. 1	732.9	78.5	732.	731.7	731.	731.7	731.	731.	731.2	731.2	730.2	730.2	78.3	730.2	730.3	729.4	729.4	731.3	730.3	730.3	730.3
2	731.9	80.9	778.	774.	766.8	774.	766.8	766.8	767.1	767.1	772.7	772.7	80.8	772.7	776.1	776.	776.	779.7	774.	774.	774.
3	731.9	81.7	774.	766.7	763.	766.7	763.	763.	762.6	762.6	763.2	763.2	81.5	763.2	761.2	757.	757.	757.4	760.2	760.2	760.2
5	733.5	80.	753.5	751.7	753.	751.7	753.	753.	752.	752.	750.	750.	80.	750.	751.	749.	749.	752.	750.	750.	750.
6	737.9	74.5	739.	737.1	737.	737.1	737.	737.	736.4	736.4	737.	737.	74.4	737.	736.2	736.	736.	737.	738.5	738.5	738.5
7	740.3	76.5	740.	740.	740.7	740.	740.7	740.7	740.5	740.5	740.	740.	76.5	740.	740.	740.5	740.5	740.7	741.	741.	741.
8	760.	75.8	762.	764.	763.6	764.	763.6	763.6	762.7	762.7	763.	763.	75.8	763.	761.	757.	757.	758.	753.3	753.3	753.3
9	*764.	79.3	753.8	755.1	757.2	755.1	757.2	757.2	757.9	757.9	756.5	756.5	79.2	756.5	757.2	757.1	757.1	758.	757.2	757.2	757.2
10	731.3	71.6	728.3	729.1	729.4	729.1	729.4	729.4	730.1	730.1	729.3	729.3	71.6	729.3	728.3	729.3	729.3	731.5	732.8	732.8	732.8
12	778.9	85.5	786.2	776.2	787.8	776.2	787.8	787.8	771.8	771.8	775.	775.	85.	775.	782.5	784.	784.	784.	788.6	788.6	788.6
13	763.6	77.5	785.5	784.8	784.9	784.8	784.9	784.9	783.1	783.1	784.1	784.1	77.3	784.1	783.1	783.	783.	793.5	784.	784.	784.
14	739.1	68.4	729.	728.8	730.	728.8	730.	730.	731.8	731.8	731.3	731.3	68.3	731.3	731.1	729.4	729.4	733.6	735.	735.	735.
15	744.	69.4	745.	748.	750.	748.	750.	750.	750.3	750.3	750.2	750.2	69.4	750.2	750.2	749.2	749.2	747.	746.5	746.5	746.5
16	744.	68.2	746.	747.1	749.	747.1	749.	749.	749.	749.	749.7	749.7	68.1	749.7	751.2	752.	752.	750.3	747.7	747.7	747.7
17	734.9	67.6	724.7	723.7	723.5	723.7	723.5	723.5	722.2	722.2	722.6	722.6	67.4	722.6	722.3	722.	722.	720.9	719.9	719.9	719.9
19	767.5	68.8	765.2	768.2	770.	768.2	770.	770.	763.	763.	749.5	749.5	68.7	749.5	732.5	732.5	732.5	715.9	731.9	731.9	731.9
20	736.5	70.8	743.5	747.5	739.9	747.5	739.9	739.9	713.5	713.5	696.	696.	71.	696.	691.5	683.5	683.5	693.8	697.2	697.2	697.2
21	700.2	67.9	702.5	705.2	700.5	705.2	700.5	700.5	704.6	704.6	702.2	702.2	67.7	702.2	690.	690.7	690.7	690.2	686.9	686.9	686.9
23	695.5	72.	698.2	693.	691.2	693.	691.2	691.2	697.2	697.2	698.2	698.2	72.	698.2	698.5	694.	694.	694.2	700.	700.	700.
24	711.2	72.6	710.6	711.4	712.9	711.4	712.9	712.9	712.4	712.4	712.9	712.9	72.2	712.9	713.4	713.6	713.6	713.7	712.1	712.1	712.1
26	704.7	74.	764.	762.7	762.	762.7	762.	762.	763.	763.	764.	764.	74.	764.	764.	765.2	765.2	766.	765.8	765.8	765.8
27	768.7	76.8	775.	773.	772.5	773.	772.5	772.5	772.	772.	771.3	771.3	76.6	771.3	771.	771.4	771.4	770.2	771.	771.	771.
28	776.	74.2	768.	767.2	766.5	767.2	766.5	766.5	763.7	763.7	759.3	759.3	74.	759.3	757.1	751.2	751.2	750.	752.	752.	752.
29	*764.2	74.3	767.	775.5	770.	775.5	770.	770.	772.1	772.1	775.	775.	76.5	775.	778.1	780.	780.	782.	782.	782.	782.
30				765.	762.2	765.	762.2	762.2	765.	765.	767.1	767.1	74.2	767.1	771.	770.7	770.7	768.5	771.3	771.3	771.3
Means	746.9	74.5	749.9	748.	747.7	748.	747.7	747.7	747.	747.	746.	746.	74.4	746.	745.1	744.1	744.1	744.5	744.6	744.6	744.6
Reduced to 32° Fah. ...	641.4		643.6	641.7	641.6	641.7	641.6	641.6	640.8	640.8	639.9	639.9		639.9	639.2	638.4	638.4	639.	639.3	639.3	639.3

* One minute late.

SEPTEMBER.]

FIRST MINIMUM OF HORIZONTAL FORCE—Continued.

[1842.]

Sept.	h. m. 2 02 20 21½	Therm., Fah.	h. m. 2 08 20 27½	h. m. 2 14 20 33½	h. m. 2 20 20 39½	h. m. 2 26 20 45½	h. m. 2 32 20 51½	Therm., Fah.	h. m. 2 38 20 57½	h. m. 2 44 21 03½	h. m. 2 50 21 09½	h. m. 2 56 21 15½	Therm., Fah.
1	731.7	78.1	730.	723.3	721.	720.5	721.	79.9	721.	724.6	725.2	727.7	77.7
2	775.7	80.	771.9	774.2	771.	764.8	756.1	80.	758.	757.7	759.8	759.	80.
3	763.7	81.4	763.	762.	760.3	758.8	759.7	81.3	760.2	753.5	748.2	745.	81.2
5	750.1	79.7	748.7	750.	751.2	751.2	750.4	79.5	751.	759.6	761.7	760.2	79.3
6	740.3	74.1	740.3	739.2	739.	733.	736.1	73.9	736.6	737.6	737.8	738.	73.7
7	741.7	76.	741.1	741.1	739.2	738.7	739.	75.8	739.	740.	740.5	735.5	75.6
8	750.9	75.6	749.	747.	747.	743.7	739.6	75.4	740.3	737.5	739.	737.7	75.2
9	757.	79.	753.2	752.1	755.	754.7	755.7	78.8	754.	753.8	754.	753.	78.6
10	734.4	71.4	736.7	734.	735.7	735.5	734.9	71.2	736.	739.3	743.1	745.2	71.
12	790.4	84.6	796.	792.	782.	775.2	772.5	84.2	777.1	775.9	771.	780.7	83.8
13	779.	77.	777.3	768.2	762.8	760.7	761.	76.7	759.	755.	755.	751.2	76.5
14	734.2	68.4	734.1	735.2	734.7	736.2	735.9	68.4	735.2	735.1	734.2	734.2	68.4
15	744.5	69.2	745.4	744.	742.2	743.1	742.	69.	741.	739.5	738.2	735.4	69.
16	747.2	68.	745.2	743.7	746.	745.2	745.2	67.9	744.	742.5	744.	743.8	67.8
17	720.4	67.2	720.4	720.6	720.2	719.7	719.1	67.1	718.2	718.7	718.2	718.1	67.
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	721.4	68.1	723.	726.4	728.	727.7	727.3	67.8	728.	724.1	723.2	723.7	67.6
21	720.2	71.7	714.7	716.5	706.6	706.2	713.1	72.	712.	709.2	711.2	709.5	72.7
22	677.	67.7	668.7	671.	673.7	677.8	686.5	67.7	688.	686.7	692.	700.9	67.7
23	696.7	71.6	693.5	695.2	696.5	701.	697.4	71.4	701.5	695.2	698.5	699.6	71.
24	712.6	71.3	713.8	710.9	710.3	709.8	709.5	70.6	710.2	712.	711.1	711.	70.3
26	765.2	73.	765.9	765.	764.7	763.7	763.	72.	763.	761.2	761.6	763.	71.4
27	770.3	76.	770.7	771.	770.	770.	769.5	75.4	769.8	770.	769.5	770.	75.
28	755.2	73.8	760.4	763.	762.7	763.8	766.	73.6	768.	767.9	767.9	768.8	73.4
29	777.5	76.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30	770.5	73.5	765.7	763.6	762.1	766.5	765.4	73.3	764.1	764.8	766.	766.	73.
Means	745.1	74.1	742.9	742.1	740.9	740.2	740.2	73.8	740.6	740.2	740.5	740.8	73.6
Reduced to 32° Fah.....	639.9		637.8	637.1	636.1	635.5	635.7		636.2	636.	636.4	636.8	

September.]

SECOND MINIMUM OF HORIZONTAL FORCE.

[1843.

[97]

758

	A. m. 15 32 9 51½	Therm., Fah.	A. m. 15 38 9 57½	A. m. 15 44 10 03½	A. m. 15 50 10 09½	A. m. 15 56 10 15½	A. m. 16 02 10 21½	Therm., Fah.	A. m. 16 08 10 27½	A. m. 16 14 10 33½	A. m. 16 20 10 39½	A. m. 16 26 10 45½
Göttingen time.....												
Observatory time.....												
Sept. 1.....	760.5	71.7	761.	759.	761.3	759.	758.5	72.	755.6	756.4	756.3	754.9
2.....	779.	75.	754.3	758.9	762.9	762.9	774.1	75.2	772.6	767.4	765.1	760.9
3.....	.....	76.6	774.	773.6	774.2	772.2	770.4	76.8	768.2	766.6	763.	762.7
5.....	789.1	76.	788.1	791.	791.	795.	796.1	76.4	798.3	800.4	793.5	799.6
6.....	781.5	71.3	770.7	787.5	785.9	783.	780.3	71.6	789.	786.	788.6	783.4
7.....	.....	69.4	767.7	770.9	769.8	770.3	771.7	69.8	769.6	773.4	773.3	770.3
8.....	762.3	71.8	763.3	768.7	763.5	759.	755.6	73.4	753.2	750.7	757.7	749.7
9.....	780.7	75.2	782.6	783.4	781.	781.	780.3	75.5	783.	786.	786.5	787.6
10.....	751.2	69.3	762.	759.2	758.6	760.	759.7	69.3	759.6	759.9	759.8	760.6
12.....	765.5	77.	765.9	765.3	765.8	763.6	767.3	78.3	766.2	766.6	766.5	766.
13.....	776.2	76.8	776.7	782.1	782.	782.	778.2	78.2	776.	776.4	776.6	773.1
14.....	.....	69.3	777.4	776.8	773.5	771.3	768.9	69.3	767.	766.	764.8	764.
15.....	762.7	66.5	763.	761.6	760.	761.7	761.9	66.6	761.	761.6	761.7	761.3
16.....	742.7	65.4	742.8	745.5	746.5	745.2	745.4	65.5	746.3	744.1	743.7	743.3
17.....	728.6	63.4	730.5	728.8	725.5	725.6	726.6	63.7	724.2	726.	725.5	722.5
19.....	730.2	63.	732.	739.5	728.5	732.5	737.3	63.2	743.2	741.	740.9	741.
20.....	748.1	71.4	743.5	739.5	741.8	733.4	739.3	71.	738.4	737.	738.	738.5
* 21.....	749.	71.8	751.8	751.2	757.	767.2	768.5	72.2	771.	773.	768.1	769.
22.....	726.	70.	729.1	731.2	732.8	732.8	732.9	69.7	736.	737.3	736.9	733.4
23.....	719.9	68.4	718.2	718.2	717.3	715.4	715.8	68.7	718.4	718.9	718.4	716.5
24.....	711.1	68.2	705.8	711.2	708.9	712.5	714.	69.6	712.2	709.5	714.1	713.3
26.....	749.7	71.	754.	753.1	751.2	752.8	756.7	72.	757.5	756.9	756.8	758.3
27.....	764.7	73.9	763.6	763.8	763.3	762.9	766.7	74.3	767.1	773.	770.6	770.4
28.....	.....	64.	743.6	743.9	745.3	744.	744.1	64.3	746.3	746.8	746.8	746.8
29.....	783.5	76.3	784.8	786.2	794.5	797.1	803.2	76.5	799.4	806.4	806.2	800.1
30.....	773.8	74.9	774.	775.2	777.1	775.1	775.	74.9	774.5	774.3	775.	778.9
Means.....	756.2	71.1	758.1	758.1	758.5	758.2	758.6	71.5	758.6	759.	756.3	757.5
Reduced to 32° Fah.....	657.7		660.3	660.1	660.3	659.8	660.		659.9	660.1	659.3	658.3

* Needle making large vibrations.

† One minute late.

SEPTEMBER.]

SECOND MINIMUM OF HORIZONTAL FORCE—Continued.

[1842.]

Göttingen time.	h. m. 16 32	Therm., Fah.	h. m. 16 38	h. m. 16 44	h. m. 16 50	h. m. 16 56	h. m. 17 02	Therm., Fah.	h. m. 17 08	h. m. 17 14	h. m. 17 20	h. m. 17 26	Therm., Fah.
Observatory time	h. m. 10 51½		h. m. 10 57½	h. m. 11 03½	h. m. 11 09½	h. m. 11 15½	h. m. 11 21½		h. m. 11 27½	h. m. 11 33½	h. m. 11 39½	h. m. 11 45½	
Sept. 1.....	753.1	72.4	750.7	747.3	745.	743.5	737.6	72.9	735.6	732.9	731.2	728.6	73.3
2.....	757.6	75.5	754.8	747.4	751.7	755.2	757.3	75.7	758.3	750.1	751.6	751.2	76.2
3.....	762.2	77.	760.	760.	759.2	758.	761.7	77.4	758.2	753.7	753.7	753.1	77.8
5.....	797.8	76.7	796.5	796.7	796.5	796.2	796.7	76.9	796.7	793.8	789.4	789.5	77.
6.....	753.2	71.9	754.7	757.	754.	754.3	752.3	72.	753.1	755.6	755.2	752.8	72.2
7.....	770.	70.3	779.8	768.9	769.2	768.2	768.4	70.8	768.5	769.9	768.8	766.6	71.3
8.....	751.9	72.8	752.5	754.2	759.4	762.8	763.4	73.1	763.5	763.7	764.1	765.2	73.5
9.....	788.5	76.	791.6	794.3	789.9	791.5	791.9	76.6	792.2	794.	793.9	792.7	77.
10.....	759.4	69.7	758.4	757.4	757.5	756.	.....	69.9	757.8	.....	760.7	760.7	70.
12.....	765.5	78.8	765.	764.3	766.	764.8	766.	79.4	765.5	763.7	765.6	765.3	80.
13.....	770.1	79.6	771.5	773.	775.3	775.8	775.6	80.	775.1	774.9	776.1	776.1	80.3
14.....	762.5	69.2	762.	759.7	759.9	758.9	758.5	69.2	758.5	757.7	755.	754.7	69.2
15.....	759.6	66.8	762.4	764.8	763.4	761.5	760.	67.	758.7	760.	760.8	759.1	67.3
16.....	744.	65.6	742.9	742.	740.3	740.5	737.3	65.8	736.	733.8	733.2	732.4	65.9
17.....	722.7	64.	723.7	722.5	721.6	720.9	721.4	64.2	721.7	721.1	722.8	725.9	64.5
19.....	738.2	63.5	741.	735.	735.2	736.7	729.4	63.8	731.8	730.1	730.1	725.7	63.8
20.....	735.7	70.8	733.5	738.2	738.2	737.3	733.5	70.6	735.5	735.9	736.5	734.6	70.5
21.....	764.8	72.5	761.4	757.5	755.4	748.1	750.7	72.7	746.3	751.9	747.1	746.5	72.7
22.....	731.	69.3	737.7	734.5	733.8	732.	732.	69.1	727.7	725.4	722.	728.	69.1
23.....	717.3	69.	717.3	716.6	717.3	715.5	718.	69.4	716.1	716.2	712.2	710.5	69.7
24.....	717.8	70.8	716.4	716.	716.5	712.3	712.2	72.	714.	.....	714.9	709.	72.4
26.....	758.7	72.7	759.8	.....	761.7	760.4	758.3	73.3	762.	764.5	764.	764.3	73.6
27.....	770.7	74.8	776.4	776.4	771.6	770.4	775.5	75.1	774.5	776.8	776.3	773.8	75.
28.....	746.8	64.7	744.8	742.8	741.5	740.8	743.3	65.3	741.9	736.3	733.7	736.1	66.
29.....	797.9	76.3	789.9	785.4	785.4	782.3	781.5	76.1	780.8	778.2	777.3	778.6	76.1
30.....	781.2	74.9	784.4	785.	787.2	.....	781.2	75.	789.	798.5	783.2	783.2	75.1
Means	756.8	71.7	757.3	755.8	755.9	753.8	754.5	72.1	754.2	755.1	752.9	752.5	72.3
Reduced to 32° Fah.	-657.4		657.8	656.2	656.1	653.3	654.3		653.8	654.6	652.3	651.8	

[1942.]

FIRST MAXIMUM OF DECLINATION.

OCTOBER.]

	<i>h. m.</i> 6 00 0 19½	<i>h. m.</i> 6 06 0 25½	<i>h. m.</i> 6 12 0 31½	<i>h. m.</i> 6 18 0 37½	<i>h. m.</i> 6 24 0 43½	<i>h. m.</i> 6 30 0 49½	<i>h. m.</i> 6 36 0 55½	<i>h. m.</i> 6 42 1 01½	<i>h. m.</i> 6 48 1 07½	<i>h. m.</i> 6 54 1 13½
Göttingen time.....										
Observatory time.....										
Oct. 1.....	573.3	573.5	573.1	573.	571.6	570.1	569.8	569.3	568.1	569.1
3.....	566.6	566.9	567.4	567.4	567.4	566.9	567.6	568.5	566.2	565.
4.....	574.2	573.6	573.	573.3	573.3	573.8	573.8	573.7	573.6	573.3
5.....	564.7	564.3	564.4	564.4	564.9	564.3	564.4	564.3	564.	563.4
6.....	575.	573.3	567.7	566.1	567.	569.8	569.8	569.8	569.8	569.4
7.....	579.	581.	582.5	585.	585.4	586.5	587.6	587.6	587.6	587.4
8.....	570.3	570.8	571.6	571.6	572.3	569.	569.	568.3	565.3	565.8
10.....	570.3	571.1	572.7	574.	573.4	573.2	574.	577.6	578.7	579.
11.....	562.1	561.9	561.2	562.8	563.9	564.4	563.2	563.8	564.1	564.1
12.....	562.8	563.	562.7	562.3	562.7	563.3	563.	561.7	563.8	563.3
13.....	560.1	*562.	561.6	561.8	563.9	565.7	566.6	565.2	565.3	565.9
14.....	566.4	567.1	*565.7	.....	565.1	563.6	563.1	562.7	563.1	561.7
15.....	565.9	564.8	564.3	564.5	564.8	564.9	563.8	563.3	563.5	564.3
17.....	563.3	562.9	561.	559.9	559.2	559.6	559.3	558.8	558.8	559.1
18.....	562.	561.9	562.4	561.5	561.4	560.1	559.7	556.6	555.5	555.2
19.....	562.4	564.1	564.4	564.4	*564.9	564.2	564.1	563.	561.8	560.3
20.....	556.4	557.3	558.6	557.1	556.5	556.5	557.	557.	554.5	559.
21.....	555.8	556.6	556.9	556.4	556.5	556.3	556.	555.7	554.5	559.
22.....	557.8	558.1	557.8	557.8	557.3	557.8	557.8	557.7	557.5	558.3
24.....	560.8	561.2	560.1	560.7	560.9	561.2	562.5	561.1	562.4	558.
25.....	562.2	562.5	562.8	562.5	562.8	563.6	563.1	563.9	563.0	565.2
26.....	562.3	562.7	563.7	563.1	562.9	563.3	563.4	563.3	563.3	563.6
27.....	564.1	564.	563.9	564.1	565.7	567.	566.6	566.9	567.4	566.3
28.....	563.2	563.1	562.9	562.7	563.7	564.5	564.5	*565.	564.8	565.8
29.....	563.8	563.9	563.7	563.3	564.2	564.8	564.9	565.2	565.1	565.4
31.....	565.2	564.2	565.1	564.9	563.8	564.	565.4	565.7	564.	560.9
Means.....	565.	565.4	565.	564.5	565.1	565.3	565.	564.9	564.7	565.4

* One minute late.

	<i>h. m.</i> 7 00 1 19½	<i>h. m.</i> 7 06 1 25½	<i>h. m.</i> 7 12 1 31½	<i>h. m.</i> 7 18 1 37½	<i>h. m.</i> 7 24 1 43½	<i>h. m.</i> 7 30 1 49½	<i>h. m.</i> 7 36 1 55½	<i>h. m.</i> 7 42 2 01½	<i>h. m.</i> 7 48 2 07½	<i>h. m.</i> 7 54 2 13½
Göttingen time.....										
Observatory time.....										
26 Oct. 1.....	570.1	569.2	567.	568.	566.8	566.7	567.2	566.8	566.9	567.5
3.....	565.3	564.9	564.4	567.9	569.	569.7	571.4	571.4	570.4	571.4
4.....	572.6	572.5	572.8	572.4	572.5	572.7	572.5	572.7	573.5	572.7
5.....	562.6	563.2	564.2	565.	566.6	566.4	566.9	566.8	567.4	567.5
6.....	582.3	583.4	582.7	582.3	.....	.....	579.7	576.	575.7	580.8
7.....	583.9	584.6	579.4	577.9	.....	677.4	577.2	578.8	580.	582.
8.....	565.8	.....	563.3	.....	566.7	565.3	565.7	566.1	564.4	567.7
10.....	579.	579.5	580.4	579.1	578.8	579.1	579.5	580.3	580.8	581.6
11.....	565.	565.7	565.7	564.6	565.6	566.6	567.3	566.4	566.8	566.9
12.....	563.	563.8	564.1	565.1	565.1	561.9	564.9	565.	565.7	565.7
13.....	568.3	569.1	568.1	567.4	567.3	566.1	565.	564.3	564.3	564.2
14.....	561.	.....	562.2	562.6	563.7	564.	563.3	.....	561.8	560.6
15.....	564.4	585.	568.1	563.5	563.3	563.3	563.1	561.1	560.1	559.3
17.....	559.6	560.	557.6	556.6	556.1	554.4	553.5	555.3	557.4	558.
18.....	557.9	561.2	561.9	559.4	555.8	552.3	552.	553.8	553.3	550.7
19.....	559.5	558.9	559.1	559.8	560.4	561.7	563.8	565.2	562.7	561.2
20.....	559.1	555.3	554.2	554.4	554.5	554.4	554.7	555.5	556.9	557.4
21.....	558.5	557.	556.2	557.	558.3	556.8	555.8	555.6	556.5	553.7
22.....	557.9	557.8	558.5	558.5	558.1	558.3	558.3	558.4	558.6	558.3
24.....	563.5	562.9	563.7	566.2	565.4	563.8	561.	559.4	559.7	559.7
25.....	564.5	564.1	564.1	563.7	563.3	562.6	561.8	563.7	563.4	563.7
26.....	563.6	563.5	562.7	562.3	562.8	563.3	562.7	563.2	563.7	563.3
27.....	564.5	564.7	562.5	563.4	563.6	564.	563.8	563.6	564.7	565.6
28.....	565.4	565.4	565.5	564.5	565.	565.2	565.2	563.6	562.8	558.2
29.....	565.	585.2	564.8	564.1	564.2	563.	563.6	563.5	563.4	563.8
31.....	569.7	569.9	569.8	569.9	559.3	560.	.....	*560.9	561.4	561.9
Means.....	565.5	565.7	565.1	565.	564.3	564.1	564.9	564.7	564.7	564.7

* One minute late.

[1842.]

SECOND MAXIMUM OF DECLINATION.

OCTOBER.]

	h. m. 18 00 12 19½	h. m. 18 06 12 25½	h. m. 18 12 12 31½	h. m. 18 18 12 37½	h. m. 18 24 12 43½	h. m. 18 30 12 49½	h. m. 18 36 12 55½	h. m. 18 42 13 01½	h. m. 18 48 13 07½	h. m. 18 54 13 13½
Göttingen time.....										
Observatory time.....										
Oct. 1.....	578.9	578.9	579.7	579.4	579.6	579.6	579.9	580.2	579.7	579.7
3.....	568.6	568.	567.9	567.8	567.5	567.5	567.6	567.9	567.4	567.9
4.....	566.	566.	565.	565.2	564.5	564.5	563.5	563.4	562.9	562.5
5.....	558.2	559.	558.9	559.3	560.5	561.1	561.6	562.3	563.	563.5
6.....	569.5	571.5	572.	572.4	572.5	572.5	572.1	572.	572.1	572.1
7.....	574.2	573.6	573.3	573.5	573.2	573.7	573.1	573.7	573.3	572.3
8.....	568.2	569.	568.7	569.5	568.2	567.9	567.7	566.9	567.	564.9
10.....	568.4	568.3	568.4	568.	567.9	567.5	567.5	567.5	567.8	567.7
11.....	558.4	558.4	558.5	558.	557.5	557.8	557.4	558.3	558.	558.7
12.....	563.5	563.	562.4	562.	561.9	561.8	561.3	561.	561.	560.4
13.....	560.8	561.	560.7	560.7	560.3	560.3	560.9	560.3	560.3	560.8
14.....	556.2	557.4	558.	559.4	559.8	559.2	559.7	560.	559.9	560.8
15.....	563.5	563.4	562.9	562.5	562.6	562.5	562.6	562.1	562.	562.2
17.....	562.4	562.7	562.4	562.5	561.6	561.6	561.7	561.6	561.5	561.4
18.....	553.9	552.9	552.6	552.2	552.1	551.9	551.7	551.3	551.2	551.4
19.....	549.8	550.5	550.6	551.2	551.5	550.7	550.9	550.6	550.1	550.9
20.....	548.5	548.4	549.	548.2	548.	548.7	547.6	548.	547.8	548.2
21.....	545.8	546.4	546.4	547.3	548.	547.7	548.4	548.2	548.4	548.7
22.....	546.4	546.3	545.8	545.5	545.4	544.9	544.3	544.9	544.7	545.4
24.....	558.7	558.8	558.2	557.5	557.4	558.1	.....	556.9	557.2	556.7
25.....	557.	556.	557.4	557.2	556.6	556.2	556.	555.6	556.7	556.4
26.....	557.6	557.8	556.5	556.3	556.	556.7	555.1	554.6	554.7	556.1
27.....	558.6	558.3	557.2	557.	557.1	557.3	557.5	557.5	557.2	556.
28.....	557.7	557.7	558.6	558.	558.	558.	558.5	558.5	557.5	558.9
29.....	556.7	556.5	555.4	555.6	556.	556.	556.7	556.7	556.7	556.5
31.....	556.	556.2	556.	556.5	556.	555.	555.	555.	554.5	554.7
Means.....	558.6	558.7	558.6	558.5	558.4	558.2	558.1	558.	557.9	557.9

Осознае.]

FIRST MINIMUM OF DECLINATION.

[1842.]

	h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.	
	2 00	2 01	2 02	2 03	2 04	2 05	2 06	2 07	2 08	2 09	2 10	2 11	2 12	2 13	2 14	2 15	2 16	2 17	2 18	2 19
Göttingen time.....	568.7	569.4	569.5	569.6	569.7	569.8	569.9	570.0	570.1	570.2	570.3	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2
Observatory time.....	568.7	569.4	569.5	569.6	569.7	569.8	569.9	570.0	570.1	570.2	570.3	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2
Oct. 1.....	568.7	569.4	569.5	569.6	569.7	569.8	569.9	570.0	570.1	570.2	570.3	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2
3.....	569.4	569.5	569.6	569.7	569.8	569.9	570.0	570.1	570.2	570.3	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2	571.3
4.....	569.5	569.6	569.7	569.8	569.9	570.0	570.1	570.2	570.3	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2	571.3	571.4
5.....	569.6	569.7	569.8	569.9	570.0	570.1	570.2	570.3	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2	571.3	571.4	571.5
6.....	569.7	569.8	569.9	570.0	570.1	570.2	570.3	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2	571.3	571.4	571.5	571.6
7.....	569.8	569.9	570.0	570.1	570.2	570.3	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2	571.3	571.4	571.5	571.6	571.7
8.....	569.9	570.0	570.1	570.2	570.3	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2	571.3	571.4	571.5	571.6	571.7	571.8
9.....	570.0	570.1	570.2	570.3	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2	571.3	571.4	571.5	571.6	571.7	571.8	571.9
10.....	570.1	570.2	570.3	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2	571.3	571.4	571.5	571.6	571.7	571.8	571.9	572.0
11.....	570.2	570.3	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2	571.3	571.4	571.5	571.6	571.7	571.8	571.9	572.0	572.1
12.....	570.3	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2	571.3	571.4	571.5	571.6	571.7	571.8	571.9	572.0	572.1	572.2
13.....	570.4	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2	571.3	571.4	571.5	571.6	571.7	571.8	571.9	572.0	572.1	572.2	572.3
14.....	570.5	570.6	570.7	570.8	570.9	571.0	571.1	571.2	571.3	571.4	571.5	571.6	571.7	571.8	571.9	572.0	572.1	572.2	572.3	572.4
15.....	570.6	570.7	570.8	570.9	571.0	571.1	571.2	571.3	571.4	571.5	571.6	571.7	571.8	571.9	572.0	572.1	572.2	572.3	572.4	572.5
16.....	570.7	570.8	570.9	571.0	571.1	571.2	571.3	571.4	571.5	571.6	571.7	571.8	571.9	572.0	572.1	572.2	572.3	572.4	572.5	572.6
17.....	570.8	570.9	571.0	571.1	571.2	571.3	571.4	571.5	571.6	571.7	571.8	571.9	572.0	572.1	572.2	572.3	572.4	572.5	572.6	572.7
18.....	570.9	571.0	571.1	571.2	571.3	571.4	571.5	571.6	571.7	571.8	571.9	572.0	572.1	572.2	572.3	572.4	572.5	572.6	572.7	572.8
19.....	571.0	571.1	571.2	571.3	571.4	571.5	571.6	571.7	571.8	571.9	572.0	572.1	572.2	572.3	572.4	572.5	572.6	572.7	572.8	572.9
20.....	571.1	571.2	571.3	571.4	571.5	571.6	571.7	571.8	571.9	572.0	572.1	572.2	572.3	572.4	572.5	572.6	572.7	572.8	572.9	573.0
21.....	571.2	571.3	571.4	571.5	571.6	571.7	571.8	571.9	572.0	572.1	572.2	572.3	572.4	572.5	572.6	572.7	572.8	572.9	573.0	573.1
22.....	571.3	571.4	571.5	571.6	571.7	571.8	571.9	572.0	572.1	572.2	572.3	572.4	572.5	572.6	572.7	572.8	572.9	573.0	573.1	573.2
23.....	571.4	571.5	571.6	571.7	571.8	571.9	572.0	572.1	572.2	572.3	572.4	572.5	572.6	572.7	572.8	572.9	573.0	573.1	573.2	573.3
24.....	571.5	571.6	571.7	571.8	571.9	572.0	572.1	572.2	572.3	572.4	572.5	572.6	572.7	572.8	572.9	573.0	573.1	573.2	573.3	573.4
25.....	571.6	571.7	571.8	571.9	572.0	572.1	572.2	572.3	572.4	572.5	572.6	572.7	572.8	572.9	573.0	573.1	573.2	573.3	573.4	573.5
26.....	571.7	571.8	571.9	572.0	572.1	572.2	572.3	572.4	572.5	572.6	572.7	572.8	572.9	573.0	573.1	573.2	573.3	573.4	573.5	573.6
27.....	571.8	571.9	572.0	572.1	572.2	572.3	572.4	572.5	572.6	572.7	572.8	572.9	573.0	573.1	573.2	573.3	573.4	573.5	573.6	573.7
28.....	571.9	572.0	572.1	572.2	572.3	572.4	572.5	572.6	572.7	572.8	572.9	573.0	573.1	573.2	573.3	573.4	573.5	573.6	573.7	573.8
29.....	572.0	572.1	572.2	572.3	572.4	572.5	572.6	572.7	572.8	572.9	573.0	573.1	573.2	573.3	573.4	573.5	573.6	573.7	573.8	573.9
31.....	572.1	572.2	572.3	572.4	572.5	572.6	572.7	572.8	572.9	573.0	573.1	573.2	573.3	573.4	573.5	573.6	573.7	573.8	573.9	574.0
Means.....	568.7	569.1	569.5	569.8	570.2	570.6	571.0	571.4	571.8	572.2	572.6	573.0	573.4	573.8	574.2	574.6	575.0	575.4	575.8	576.2

* One minute late.

OCTOBER.]

FIRST MINIMUM OF DECLINATION—Continued.

[1842.]

[97]

764

	h. m. 3 00 21 19½	h. m. 3 06 21 25½	h. m. 3 12 21 31½	h. m. 3 18 21 37½	h. m. 3 24 21 43½	h. m. 3 30 21 49½	h. m. 3 36 21 55½	h. m. 3 42 22 01½	h. m. 3 48 22 07½	h. m. 3 54 22 13½
Göttingen time.....										
Observatory time.....										
Oct. 1.....	567.9	568.9	567.1	568.	567.	568.3	567.9	567.8	567.7	567.8
3.....	569.9	569.	569.8	570.	*571.3	572.6	572.9	572.8	572.9	572.8
4.....	567.	567.7	567.3	566.7	566.6	566.9	566.9	566.1	566.5	566.3
5.....	571.7	573.	571.	571.	571.1	571.8	571.4	†571.4	571.2	570.5
6.....	580.	580.	580.	580.	580.3	580.3	580.9	581.1	581.3	581.3
7.....	569.	569.1	568.	567.1	567.	566.5	568.	566.7	567.3	566.8
8.....	585.7	585.1	584.2	584.3	584.	583.7	582.7	582.3	582.4	581.9
10.....	587.7	587.8	586.9	585.8	586.	585.8	584.4	583.6	583.6	583.0
11.....	563.4	562.5	562.	562.1	562.3	561.3	561.6	561.7	561.6	561.8
12.....	564.6	564.	564.2	568.7	568.2	567.5	567.8	566.4	565.4	563.8
13.....	564.6	564.1	563.7	563.7	563.8	564.	560.	563.3	565.	563.5
14.....	564.4	564.3	563.8	563.7	563.3	563.9	563.2	563.2	563.4	561.3
15.....	573.4	571.2	574.2	575.6	578.2	580.8	583.0	584.4	583.4	581.3
17.....	575.5	571.9	568.2	566.4	564.9	566.5	564.2	564.3	563.4	575.3
18.....	573.1	569.5	569.4	572.7	576.7	579.6	577.9	577.0	576.3	575.3
19.....	561.3	560.5	561.4	561.3	561.	560.9	560.5	560.0	560.4	560.0
20.....	559.6	†559.2	562.5	560.2	561.8	561.7	561.5	561.	561.7	562.8
21.....	560.5	560.	563.1	561.1	560.5	560.6	559.7	559.3	559.4	559.3
22.....	*555.5	555.8	555.9	556.2	556.3	554.	554.7	555.3	555.6	555.7
24.....	563.	562.7	564.9	567.1	563.9	569.2	571.5	571.4	571.5	571.
25.....	567.7	566.8	565.5	563.6	563.9	563.	567.7	575.3	569.	566.6
26.....	565.4	566.3	565.7	566.4	565.6	565.4	565.7	565.3	564.9	564.7
27.....	566.	567.3	566.5	566.6	565.9	.....	567.7	569.	567.3	567.3
28.....	565.	564.4	563.	561.9	562.4	562.7	563.	563.3	565.	566.7
29.....	563.8	564.	567.1	569.7	571.1	573.1	572.5	570.6	573.4	573.
31.....	565.	565.5	565.5	565.6	566.2	566.4	566.2	566.9	567.	566.3
Means.....	567.3	566.9	567.	567.	567.4	567.9	568.1	568.3	568.4	568.3

* One minute late.

† Two minutes late.

[1842.]

SECOND MINIMUM OF DECLINATION.

OCTOBER.]

	<i>h. m.</i> 13 00 7 19½	<i>h. m.</i> 13 06 7 25½	<i>h. m.</i> 13 12 7 31½	<i>h. m.</i> 13 18 7 37½	<i>h. m.</i> 13 24 7 43½	<i>h. m.</i> 13 30 7 49½	<i>h. m.</i> 13 36 7 55½	<i>h. m.</i> 13 42 8 01½	<i>h. m.</i> 13 48 8 07½	<i>h. m.</i> 13 54 8 13½
Göttingen time.....										
Observatory time.....										
Oct. 1.....	579.3	580.2	580.7	581.2	581.	581.4	584.2	585.4	586.2	586.3
3.....	585.7	586.	586.3	587.2	587.1	587.1	586.7*	587.5	586.	582.6
4.....	582.1	582.4	582.8	582.1	584.6	583.8	594.6	585.	585.	586.2
5.....	510.4	511.1	511.7	506.5	504.7	502.4	*499.6	498.3	495.2	494.3
6.....	599.	600.6	601.2	600.4	599.1	599.6	598.2	596.2	595.	594.3
7.....	593.8	594.1	594.5	594.9	595.2	595.	594.	593.4	590.5.	590.5.
8.....	586.2	586.5	586.8	585.6	585.	585.2	585.6	586.2	585.2	586.
10.....	587.7	587.	588.9	590.4	589.6	589.	592.6	594.	595.4	594.
11.....	570.5	570.6	570.7	569.7	569.	571.4	572.4	572.2	572.6	572.6
12.....	567.1	567.5	568.2	568.2	568.	568.	568.5	568.	568.	569.1
13.....	560.4	562.2	560.4	559.7	559.7	560.2	561.	563.2	564.	565.2
14.....	567.6	570.	569.6	568.3	567.4	570.5	569.5	569.2	569.	569.5
15.....	564.7	565.6	566.6	567.8	567.2	568.2	568.3	569.	571.	572.2
17.....	565.4	566.5	567.4	570.6	566.5	563.7	565.8	565.4	566.4	567.2
18.....	569.1	569.2	568.7	568.6	570.9	569.7	568.4	568.6	569.3	568.2
19.....	.....	.....	.....	*566.	566.1	565.8	566.	567.2	567.2	566.1
20.....	563.4	563.1	562.7	563.8	565.1	565.	566.6	568.5	568.8	568.7
21.....	565.2	564.8	566.5	566.7	566.2	567.6	567.5	565.9	566.6	567.
22.....	569.1	569.	570.1	570.	569.7	569.4	570.	569.7	570.	571.3
24.....	564.1	565.5	567.1	568.	567.9	567.	567.1	566.8	567.8	568.4
25.....	570.	570.2	569.6	570.4	571.2	571.9	571.	572.	572.1	571.7
26.....	570.7	571.1	565.8	566.2	565.1	565.9	566.8	566.5	566.7	568.8
27.....	562.1	562.9	567.2	569.5	570.1	570.3	569.1	568.9	569.6	567.9
28.....	567.5	568.	567.6	567.9	567.6	567.6	566.9	567.2	567.6	568.1
29.....	566.	562.8	561.9	561.7	561.	561.3	561.6	563.3	564.	564.3
31.....	566.7	568.3	569.8	570.	568.7	569.3	571.	569.9	571.3	569.7
Means.....	570.1	570.6	570.9	570.8	570.5	570.6	570.9	571.1	571.2	571.2

[1842.

MAXIMUM OF VERTICAL FORCE.

OCTOBER.]

	h. m. 22 04 16 23½	Therm., Fah.	h. m. 22 10 16 29½	h. m. 22 16 16 35½	h. m. 22 22 16 41½	h. m. 22 28 16 47½	h. m. 22 34 16 53½	Therm., Fah.	h. m. 23 40 16 59½	h. m. 23 46 17 05½	h. m. 23 52 17 11½	h. m. 23 58 17 17½
Göttingen time.....												
Observatory time.....												
Oct. 1.....	827.1	78.8	827.	827.	826.1	826.	825.3	78.6	825.	825.2	826.	826.
3.....	819.	76.7	818.4	818.	817.	816.6	816.	76.2	816.	814.	813.8	813.
4.....	797.9	75.	797.	797.	797.	796.1	795.5	74.8	795.	795.	795.	794.5
5.....	769.2	73.3	769.	769.	769.	768.1	767.5	72.9	767.	767.	767.	761.5
6.....	740.	69.5	739.	739.	734.	732.	730.2	68.8	728.	727.	725.	723.5
7.....	820.	77.	820.	819.	818.7	818.	818.	76.9	817.	816.	816.	815.6
8.....	*796.	76.8	797.	797.	797.8	798.9	799.	76.5	800.	800.	801.	801.5
10.....	786.1	72.	786.	785.2	783.2	782.	781.	71.6	780.2	779.	778.	777.
11.....	765.	72.6	765.	765.	765.	765.	765.	72.2	764.	764.9	765.	764.8
12.....	773.	72.3	772.8	772.	772.	771.4	771.	72.3	770.7	770.7	770.6	770.
13.....	790.5	74.	789.5	788.7	787.7	786.7	785.6	73.2	784.2	783.2	782.7	781.5
14.....	784.	72.5	783.	782.	781.9	780.9	780.1	72.	779.1	777.1	777.	775.8
15.....	746.8	69.2	744.8	743.5	743.	741.2	740.	69.	739.	738.8	738.	737.
17.....	811.	75.	811.	810.1	809.5	808.6	807.	74.1	806.1	805.5	805.	804.
18.....	831.2	77.3	831.	831.	831.8	831.6	831.7	77.	831.	830.5	830.	830.
19.....	727.8	68.	728.	727.	726.	725.4	724.7	67.5	723.6	722.7	722.	720.
20.....	725.	67.1	723.5	722.6	720.	718.7	716.2	66.7	714.7	712.	710.	708.
21.....	780.4	73.5	780.9	781.1	782.	782.7	783.4	73.5	784.2	785.	786.	786.
22.....	763.4	70.	763.8	763.7	764.	764.	764.	70.3	764.4	764.7	765.7	766.1
23.....	787.	72.	786.2	786.	785.7	785.	785.	71.8	784.	784.	784.	783.
25.....	731.5	67.4	730.	728.	727.	724.2	722.3	66.7	721.	720.8	719.	717.8
26.....	761.7	71.	762.	761.5	761.	760.5	760.5	70.6	760.	759.2	759.	758.
27.....	748.1	70.	747.8	747.8	747.6	747.3	747.6	69.5	747.	746.	746.	745.5
28.....	780.7	73.	780.2	780.1	780.	780.	780.	73.	780.5	781.	781.4	782.
29.....	781.5	73.1	781.1	781.	782.1	782.1	782.	72.3	781.1	780.6	780.	780.
31.....	749.5	69.5	749.7	751.	751.2	751.7	752.	69.	751.	750.4	750.1	750.
Means.....	776.6	72.6	776.3	776.7	775.6	775.1	774.5	72.2	773.8	773.3	773.	772.
Reduced to 32° Fah.....	229.1		229.7	230.	230.8	231.2	231.5		232.6	233.0	234.9	235.5

* Two minutes late.

[1842.]

MAXIMUM OF VERTICAL FORCE—Continued.

OCTOBER.]

Göttingen time. Observatory time.	<i>h. m.</i> 23 04 17 23½	Therm., Fah.	<i>h. m.</i> 23 10 17 29½	<i>h. m.</i> 23 16 17 35½	<i>h. m.</i> 23 22 17 41½	<i>h. m.</i> 23 28 17 47½	<i>h. m.</i> 23 34 17 53½	Therm., Fah.	<i>h. m.</i> 23 40 17 59½	<i>h. m.</i> 23 46 18 05½	<i>h. m.</i> 23 52 18 11½	<i>h. m.</i> 23 58 18 17½	Therm., Fah.
Oct. 1	824.7	78.	824.1	824.	824.2	824.	824.	77.6	824.	824.	823.	823.	77.3
3	812.5	76.	812.	810.	810.	811.	810.5	76.6	809.	809.	808.	807.1	75.3
4	794.	74.3	794.6	793.1	793.	793.	791.5	73.7	790.2	788.9	788.9	788.	73.2
5	764.	72.5	764.6	764.	764.	764.	763.	72.1	763.	762.	762.	761.2	71.8
6	721.5	68.5	719.5	719.	717.	716.5	716.	68.2	715.3	715.	714.	714.	68.
7	815.2	76.5	815.	814.5	815.	814.	814.	76.	813.7	813.5	813.	812.	75.6
8	803.5	76.1	802.	803.5	804.	803.8	803.8	75.8	803.8	804.	804.5	804.7	75.5
10	775.5	70.5	775.	772.6	771.	769.8	768.2	70.2	767.	766.	764.2	761.7	70.
11	765.	72.	764.6	764.	764.	764.	764.	72.	764.	763.8	763.2	763.	71.9
12	769.5	72.	770.	770.	770.	769.	769.	71.4	768.	767.1	767.	768.4	71.2
13	781.	71.6	779.9	779.2	778.1	777.2	776.8	70.9	775.4	772.8	770.7	767.6	70.2
14	775.	71.3	773.8	773.	772.3	772.	771.	71.1	770.	769.	768.	768.	71.
15	736.5	68.	736.	735.	734.1	734.	732.2	67.7	731.	729.4	728.5	727.2	67.4
17	803.2	73.	801.7	801.	800.	798.6	798.3	73.	797.	795.	793.6	792.5	73.
18	830.	76.2	830.	829.1	828.4	827.9	827.2	76.1	826.2	825.2	824.	823.	76.
19	719.	67.	718.4	716.9	716.	714.1	713.1	67.	712.6	712.2	711.7	711.2	67.4
20	706.	65.	705.	702.	699.3	698.	696.6	64.4	694.	691.7	691.1	687.7	64.
21	785.	73.	787.7	788.	788.	787.1	787.2	72.6	787.5	787.4	787.4	787.4	72.3
22	766.6	70.9	767.1	768.	769.	769.8	770.	71.5	770.9	771.9	772.8	773.2	72.
24	782.2	71.5	782.	781.3	780.7	780.	779.6	71.3	779.	778.	777.	776.5	71.
25	716.	66.	714.2	713.1	711.1	710.	708.3	65.7	707.	705.9	704.	703.1	65.5
26	757.	70.	758.	756.5	754.5	753.6	753.	69.6	751.7	750.7	749.	748.	69.
27	745.2	68.5	745.	744.6	743.9	742.8	741.	68.5	740.5	739.2	739.	738.5	68.5
28	782.4	71.5	782.	781.	779.8	779.	778.8	71.9	778.	778.	777.5	777.1	72.3
29	779.	71.5	778.5	778.	777.	776.9	776.	71.3	775.	774.3	774.	773.5	71.
31	750.7	70.8	751.	752.	753.1	754.	756.	71.3	758.	759.2	761.5	762.2	71.8
Means	771.5	71.6	771.1	770.4	769.8	769.4	768.8	71.4	768.1	767.4	767.1	766.	71.2
Reduced to 32° Fah.	236.6		236.7	236.5	236.4	236.5	236.4		236.4	236.4	236.8	236.3	

† Two minutes late.

• One minute late.

OCTOBER.]

MINIMUM OF VERTICAL FORCE.

[1843.]

[97]

768

	h. m. 12 34 6 53½	Therm., Fah.	h. m. 12 40 6 59½	h. m. 12 46 7 05½	h. m. 12 52 7 11½	h. m. 12 58 7 17½	h. m. 13 04 7 23½	Therm., Fah.	h. m. 13 10 7 29½	h. m. 13 16 7 35½	h. m. 13 22 7 41½	h. m. 13 28 7 47½
Göttingen time.....	718.	70.2	718.	719.9	720.4	721.4	721.7	71.5	722.6	724.	727.8	731.5
Observatory time.....	752.5	73.8	753.	753.5	753.8	754.	754.	74.	754.	754.3	757.8	761.7
Oct. 1.....	807.9	74.	808.	807.2	806.9	806.8	806.2	74.3	804.8	803.4	801.7	801.1
2.....	716.	69.4	716.	716.3	716.6	717.1	718.2	70.3	721.1	723.6	726.9	738.4
3.....	759.9	71.4	760.	760.	760.8	761.2	762.5	73.2	763.2	765.2	767.2	768.8
4.....	794.1	76.6	794.3	795.	795.3	795.9	796.6	76.8	790.	790.	791.8	792.9
5.....	700.6	69.4	701.4	703.	703.5	706.5	707.2	69.8	709.	710.7	715.9	718.
6.....	781.	74.	781.2	782.6	783.7	785.2	786.2	74.6	787.6	788.2	789.	790.6
7.....	760.	70.4	760.	760.	760.	760.	760.	70.4	759.2	759.3	759.4	759.6
8.....	832.3	78.3	833.4	834.2	835.3	837.2	837.4	78.2	837.9	838.1	838.1	837.9
9.....	764.2	71.	764.2	764.	764.3	764.3	763.4	71.	763.5	761.	763.6	764.
10.....	753.	70.3	753.	752.9	753.3	753.6	754.8	70.9	756.	756.	757.2	758.6
11.....	813.1	76.7	817.5	818.9	820.4	821.4	821.7	76.5	822.5	823.8	825.	825.2
12.....	784.7	72.6	785.3	786.	786.1	787.1	788.	73.	789.	790.2	790.7	792.7
13.....	790.	73.1	791.2	791.2	792.6	793.	793.7	73.7	795.3	795.8	796.6	797.3
14.....	802.5	74.1	802.1	802.7	802.8	803.3	803.3	74.9	803.3	803.3	803.1	803.1
15.....	741.2	67.6	740.2	739.2	738.1	737.3	737.8	68.4	737.7	738.4	738.6	739.2
16.....	739.2	68.1	738.	737.	735.5	734.4	732.7	66.3	733.9	733.1	732.5	731.
17.....	702.4	61.7	704.1	706.8	709.3	711.7	713.3	66.	715.4	717.4	718.2	726.9
18.....	833.7	75.3	833.	832.9	832.3	832.1	831.8	75.2	830.5	830.5	827.8	827.7
19.....	751.2	68.	751.4	752.3	752.1	751.4	750.7	68.7	749.2	747.6	746.	745.
20.....	745.5	68.5	744.6	744.2	744.2	746.5	746.6	69.1	747.1	747.2	747.5	748.2
21.....	726.9	66.4	726.3	724.8	723.3	721.7	721.1	66.2	719.	718.1	717.3	716.
22.....	730.	66.	727.4	724.8	723.	721.2	719.9	66.6	717.7	715.9	714.5	714.1
23.....	762.5	69.7	762.4	762.1	762.3	762.	762.	70.1	762.3	762.7	762.3	762.9
Means.....	763.	71.	763.1	763.3	763.5	763.7	763.8	71.7	764.1	764.3	764.9	765.8
Reduced to 32° Fah....	236.1		234.4	232.8	231.2	229.6	227.9		226.7	225.4	224.6	224.1

* Supplied.

† One minute later.

OCTOBER.]

MINIMUM OF VERTICAL FORCE—Continued.

[1842.]

Göttingen time.....	h. m. 13 34	Therm., Fah.	h. m. 13 40	h. m. 13 46	h. m. 13 52	h. m. 13 58	h. m. 14 04	Therm., Fah.	h. m. 14 10	h. m. 14 16	h. m. 14 22	h. m. 14 28	Therm., Fah.
Observatory time.....	7 53½		7 59½	8 05½	8 11½	8 17½	8 23½		8 29½	8 35½	8 41½	8 47½	
Oct. 1.....	735.4	72.8	740.	743.	745.9	748.7	752.7	74.2	756.	759.	762.4	765.7	76.4
2.....	765.4	76.	769.3	771.6	775.1	778.6	781.7	76.4	784.3	786.7	789.3	792.1	77.4
3.....	800.	74.6	799.2	799.	798.	797.7	797.8	75.4	798.2	798.4	799.	800.	77.3
4.....	733.4	71.1	735.6	738.5	740.6	742.3	744.6	72.1	747.2	749.	751.9	755.9	73.6
5.....	771.1	74.4	773.2	776.	779.	781.3	783.6	75.4	786.	787.5	788.8	790.2	75.4
6.....	796.	77.	796.5	797.7	801.	802.4	804.3	77.2	805.9	807.7	809.2	811.1	77.2
7.....	721.3	70.2	725.4	727.2	729.7	731.7	734.	70.7	736.	738.	741.9	741.9	71.4
8.....	791.1	75.1	792.	792.4	793.2	794.9	796.5	76.3	798.5	800.5	802.1	803.1	76.9
9.....	759.7	72.	760.3	761.2	762.1	763.9	765.2	73.2	767.4	770.	772.3	774.	75.7
10.....	837.8	77.5	837.5	837.2	837.	837.1	837.5	77.5	836.3	836.	836.	835.6	77.
11.....	764.7	71.9	765.4	765.8	766.3	767.	767.5	72.8	769.8	771.8	773.5	774.8	72.8
12.....	760.2	71.5	760.6	762.	763.	764.7	767.2	72.4	769.5	771.	772.3	774.1	73.
13.....	826.	76.2	826.8	827.	828.	828.2	828.1	76.	828.7	829.8	829.2	829.	75.6
14.....	793.8	74.2	794.9	796.2	797.9	800.1	801.9	75.5	804.5	806.7	808.9	810.3	76.5
15.....	781.	72.1	780.6	780.8	780.3	781.2	782.7	73.3	783.2	784.9	786.3	788.3	75.4
16.....	798.6	74.2	799.3	799.4	800.5	801.	801.6	74.5	801.9	802.8	803.6	803.	74.5
17.....	803.7	74.	803.8	804.	804.5	805.2	806.5	75.	807.3	808.7	809.5	810.5	75.2
18.....	740.	69.4	740.	741.	741.9	743.1	744.1	70.	745.3	746.5	747.9	749.1	70.7
19.....	720.4	66.8	720.	719.5	719.	718.8	719.6	67.4	720.7	722.	723.7	725.9	67.8
20.....	729.3	69.3	732.3	734.5	737.8	739.5	742.6	70.	745.6	748.7	751.7	754.5	71.4
21.....	827.	75.	826.	826.2	826.7	825.	823.9	74.8	823.2	823.2	822.7	822.7	74.7
22.....	744.6	69.2	743.8	743.8	744.9	744.9	746.2	69.6	746.6	747.3	748.	748.4	70.
23.....	749.3	69.8	750.5	752.2	753.9	755.4	757.2	71.	758.1	759.5	760.2	761.3	71.
24.....	713.5	66.5	713.7	712.8	712.1	711.6	712.8	67.6	714.	714.9	716.	717.5	69.6
25.....	713.9	67.	714.5	714.8	715.8	716.8	718.2	68.8	720.2	722.9	725.7	729.1	70.8
26.....	763.3	70.3	763.7	764.3	764.4	765.7	766.3	70.5	767.	767.	767.6	768.5	71.
27.....	766.9	72.2	767.8	768.1	769.9	771.2	772.5	73.	773.9	775.4	776.6	778.3	73.8
28.....	233.8		232.6	221.5	220.5	219.8	219.		217.7	216.5	215.	214.	
Reduced to 32° Fah.....													

[1843.]

FIRST MAXIMUM OF HORIZONTAL FORCE.

OCTOBER.]

Göttingen time. Observatory time.	h. m.		Therm., Fah.		h. m.		Therm., Fah.		h. m.		Therm., Fah.		h. m.		Therm., Fah.		h. m.		Therm., Fah.		h. m.		Therm., Fah.	
	11 32	5 51½	11 38	6 03½	11 44	6 09½	11 50	6 15½	11 56	6 21½	12 02	6 27½	12 08	6 33½	12 14	6 39½	12 20	6 45½	12 26	6 51½	12 32	6 57½	12 38	7 03½
Oct 1	722.6	718.	718.	718.	718.8	719.4	719.7	719.8	719.8	719.8	718.8	717.8	717.8	717.8	717.8	717.8	717.8	717.8	717.8	717.8	717.8	717.8	717.8	717.8
3	719.6	718.9	718.9	718.9	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8
4	715.5	716.	716.	716.	716.6	717.3	717.3	717.3	717.3	717.3	717.3	717.3	717.3	717.3	717.3	717.3	717.3	717.3	717.3	717.3	717.3	717.3	717.3	717.3
5	693.	693.8	693.8	693.8	694.2	695.	695.	695.	695.2	696.	696.	696.	696.	696.	696.	696.	696.	696.	696.	696.	696.	696.	696.	696.
6	701.5	702.8	702.8	702.8	704.2	705.9	705.9	705.9	707.7	708.	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2
7	701.8	703.3	703.3	703.3	704.4	705.6	705.6	705.6	706.	706.	706.	706.	706.	706.	706.	706.	706.	706.	706.	706.	706.	706.	706.	706.
8	707.7	708.9	708.9	708.9	709.8	710.2	710.2	710.2	711.4	711.4	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6
10	705.8	705.2	705.2	705.2	704.	704.	704.	704.	704.	704.	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7	703.7
11	766.3	764.2	764.2	764.2	764.1	764.1	764.1	764.1	763.4	763.4	763.1	763.1	763.1	763.1	763.1	763.1	763.1	763.1	763.1	763.1	763.1	763.1	763.1	763.1
12	777.3	777.8	777.8	777.8	778.7	779.	779.	779.	779.3	779.3	779.	779.	779.	779.3	779.3	779.3	779.3	779.3	779.3	779.3	779.3	779.3	779.3	779.3
13	777.3	777.8	777.8	777.8	778.7	779.	779.	779.	779.3	779.3	779.	779.	779.	779.3	779.3	779.3	779.3	779.3	779.3	779.3	779.3	779.3	779.3	779.3
14	759.4	757.6	757.6	757.6	758.4	758.9	758.9	758.9	760.1	760.1	761.3	761.3	761.3	761.3	761.3	761.3	761.3	761.3	761.3	761.3	761.3	761.3	761.3	761.3
15	775.2	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8	773.8
17	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5	782.5
18	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5
19	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6
20	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6
21	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6
22	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6
23	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6
24	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6
25	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6
26	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6
27	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6
28	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6
29	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6
31	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6	769.6
Means.	760.3	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5	749.5
Reduced to 32° Fah.	663.6	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3	663.3

† One minute late.

* Two minutes late.

October.]

SECOND MAXIMUM OF HORIZONTAL FORCE.

[1942.]

Göttingen time..... Observatory time.....	<i>h. m.</i> 21 02 15 21½	Therm., Fah.	<i>h. m.</i> 21 08 15 27½	<i>h. m.</i> 21 14 15 33½	<i>h. m.</i> 21 20 15 39½	<i>h. m.</i> 21 26 15 45½	<i>h. m.</i> 21 32 15 51½	Therm., Fah.	<i>h. m.</i> 21 38 15 57½	<i>h. m.</i> 21 44 16 03½	<i>h. m.</i> 21 50 16 09½	<i>h. m.</i> 21 56 16 15½
Oct. 1.....	749.1	75.8	750.2	750.6	753.1	755.4	756.2	75.8	754.8	756.4	761.8	764.7
3.....	730.5	74.8	737.3	739.4	741.	743.3	742.2	74.7	744.7	744.8	745.	743.9
4.....	728.	71.8	722.4	724.6	722.	724.7	721.3	71.6	723.	724.3	724.6	726.4
5.....	712.7	70.	714.1	716.2	715.	714.2	718.9	70.	718.1	719.	717.6	717.5
6.....	718.7	66.9	718.	717.	715.2	716.2	712.5	66.3	712.7	714.5	711.3	711.
7.....	728.	74.	727.2	729.5	731.3	730.7	724.2	74.	729.	727.5	731.2	733.
8.....	748.1	73.9	750.1	754.2	758.5	761.3	765.	74.1	767.	773.8	773.	774.5
10.....	763.	70.2	764.	764.4	765.6	768.1	768.7	70.	766.	766.2	768.5	766.6
11.....	778.2	69.6	776.7	776.5	776.	775.	778.7	69.8	775.5	774.7	774.7	775.
12.....	789.6	70.1	789.	788.	787.2	787.	785.7	70.	786.	784.4	784.1	783.6
13.....	817.6	71.2	818.5	820.1	819.1	818.4	816.2	70.8	815.1	812.	808.6	807.2
14.....	802.	70.	800.	801.	800.5	799.	798.7	70.	796.8	795.	794.	794.7
15.....	788.6	67.	787.7	789.5	794.	792.2	788.	66.9	786.	790.	791.2	789.5
17.....	828.7	72.6	821.5	828.3	833.5	825.7	817.3	72.6	811.6	813.4	807.1	800.8
18.....	814.1	75.5	814.3	816.1	820.3	819.	823.6	75.5	825.7	823.7	822.2	821.6
19.....	773.	65.5	775.	775.5	772.	778.1	778.7	65.2	778.3	777.	775.4	775.4
20.....	781.	64.6	779.6	777.4	775.5	774.4	774.8	64.1	773.	770.8	764.6	768.1
21.....	785.2	68.3	786.7	788.5	793.2	794.9	795.7	68.6	795.2	789.7	783.4	783.9
22.....	772.4	67.5	773.	772.4	771.	769.	768.5	67.5	767.	767.5	767.1	768.2
24.....	800.6	70.8	798.3	796.8	795.2	795.	793.7	70.9	795.2	798.7	801.	801.2
25.....	810.	66.5	809.5	809.5	807.8	806.7	803.3	66.	801.6	800.7	801.5	800.8
26.....	804.6	66.8	811.2	818.2	816.6	815.6	813.5	66.6	812.5	803.4	801.5	800.8
27.....	797.7	66.2	799.6	799.7	799.	797.2	791.	66.	789.	794.	792.	790.7
28.....	785.	69.	784.	783.7	783.5	780.7	782.	68.	781.5	783.7	782.	780.
29.....	791.7	69.4	783.8	788.	791.5	795.6	789.	69.5	805.8	804.6	804.2	801.8
31.....	788.1	66.5	788.	788.6	786.5	786.5	785.5	66.3	786.6	782.5	782.7	783.2
Means.....	776.6	69.8	776.9	777.8	778.6	779.	777.8	69.6	777.5	777.4	776.5	776.1
Reduced to 32° Fah.....	682.1		682.5	683.2	684.4	684.9	683.8		683.5	683.4	682.5	682.1

OCTOBER.]

SECOND MAXIMUM OF HORIZONTAL FORCE—Continued.

[1942.]

Oct.	h. m. Therm., Fah.	h. m. 22 08 16 37½	h. m. 22 14 16 33½	h. m. 22 26 16 45½	h. m. 22 32 16 51½	Therm., Fah.	h. m. 22 38 16 57½	h. m. 22 44 17 03½	h. m. 22 50 17 09½	h. m. 22 56 17 15½	Therm., Fah.
Oct. 1.....	765.	.....	792.	759.	758.7	75.8	760.	764.	757.5	753.5	75.8
2.....	743.7	744.2	744.2	743.3	743.3	74.5	744.3	743.	744.	743.	74.6
3.....	737.5	728.	729.7	728.	728.2	71.6	731.2	730.	727.5	729.9	71.4
4.....	717.7	718.8	716.9	719.	720.7	69.8	731.6	732.	722.5	724.	69.4
5.....	710.5	711.	711.	710.5	712.5	66.8	713.2	713.5	710.7	710.7	66.
6.....	733.3	732.5	732.5	731.	730.2	74.	731.5	731.	729.	738.5	74.
7.....	772.	774.7	773.7	768.	765.5	74.5	765.2	765.	753.6	751.	74.7
8.....	766.3	767.	763.5	763.1	763.	69.6	769.	763.5	763.	763.5	69.
9.....	775.2	776.	776.5	776.7	777.	70.	775.6	776.7	776.5	777.	70.
10.....	768.2	769.	768.	768.5	768.4	70.	769.	768.2	769.3	769.2	70.
11.....	806.7	806.1	805.6	801.5	799.8	70.3	797.2	796.2	796.	795.	70.
12.....	794.8	799.4	798.4	792.2	791.	69.6	792.2	788.	788.9	792.7	69.3
13.....	798.7	790.	789.	793.7	794.8	66.4	793.6	795.7	788.9	805.5	66.
14.....	811.7	809.	809.	816.8	813.2	71.6	813.	810.	806.6	802.7	71.2
15.....	823.7	820.	823.3	817.2	817.6	75.4	814.	818.	818.1	816.7	75.3
16.....	779.1	779.1	779.1	786.7	782.8	64.6	787.5	789.4	788.8	785.3	64.4
17.....	767.1	773.	771.7	764.5	771.4	68.	773.7	770.1	767.	768.5	63.5
18.....	782.	780.8	781.9	783.2	784.	69.5	784.1	785.	785.5	787.	70.
19.....	766.	769.2	768.	768.5	768.9	69.1	769.	770.1	769.8	769.2	68.4
20.....	800.	797.	795.5	793.2	792.5	70.5	793.	793.	791.5	789.7	70.3
21.....	795.2	793.2	795.5	793.2	793.8	64.8	792.1	793.3	792.	794.	64.3
22.....	796.5	797.6	795.2	786.2	795.	66.	800.5	804.	800.	799.7	66.
23.....	773.2	777.2	785.7	781.	778.2	65.9	779.	779.7	777.7	778.2	65.9
24.....	775.7	777.5	778.	780.	778.5	69.1	778.7	776.2	779.	779.2	69.1
25.....	801.7	800.3	799.	796.7	795.5	69.	793.7	791.7	796.	794.9	69.
26.....	782.5	780.7	783.2	783.	784.	65.5	780.2	.....	777.	775.7	65.
27.....	775.6	774.8	775.9	774.5	774.2	69.3	774.8	774.6	774.1	774.3	69.3
28.....	691.6	691.8	692.2	691.2	691.		691.6	691.5	691.	691.3	
29.....	Reduced to 32° Fah.										
30.....											
31.....											
Means.....											
Reduced to 32° Fah.											

OCTOBER.]

FIRST MINIMUM OF HORIZONTAL FORCE.

[1842.]

Göttingen time..... Observatory time.	<i>h. m.</i> 1 02 19 21½	<i>h. m.</i> 1 08 19 27½	<i>h. m.</i> 1 14 19 33½	<i>h. m.</i> 1 20 19 39½	<i>h. m.</i> 1 26 19 45½	<i>h. m.</i> 1 32 19 51½	<i>Therm., Fah.</i>	<i>h. m.</i> 1 38 19 57½	<i>h. m.</i> 1 44 20 03½	<i>h. m.</i> 1 50 20 09½	<i>h. m.</i> 1 56 20 15½
Oct. 1.....	761.	761.5	760.	760.	759.	758.6	74.	760.9	762.7	763.7	763.4
2.....	736.2	739.7	733.4	734.2	735.5	733.7	73.9	731.8	734.8	735.3	734.
3.....	729.	730.2	730.4	730.2	731.3	732.	69.3	730.2	731.	730.	730.2
4.....	729.2	728.5	727.2	728.	728.	727.5	68.2	727.	727.	725.5	725.5
5.....	714.	713.7	714.	712.2	709.	704.2	65.5	706.2	706.	704.3	705.3
6.....	741.2	741.	741.	742.	743.7	743.9	71.8	744.6	746.6	746.	747.6
7.....	740.4	743.8	744.6	745.7	744.4	739.5	70.9	733.6	729.2	725.9	722.1
8.....	775.	775.	774.2	775.2	775.	774.	66.8	773.4	771.1	771.	772.4
9.....	778.4	778.5	778.	777.	772.2	777.5	69.	778.	778.	778.2	778.
10.....	778.7	778.	779.2	780.	779.9	778.4	68.5	778.1	778.7	778.7	779.
11.....	771.	771.	769.	771.	774.	778.4	67.5	.....	781.9	774.2	778.1
12.....	783.	783.2	783.1	783.	783.3	784.	68.7	784.	786.3	786.1	787.
13.....	800.4	815.2	817.6	806.	797.5	790.7	63.8	782.9	783.3	782.7	782.8
14.....	803.9	802.	801.	799.	801.1	804.	69.3	801.	803.4	804.8	811.6
15.....	817.	819.7	820.	825.	826.	826.	73.5	825.5	827.	830.7	831.8
16.....	780.2	779.3	784.1	785.7	780.	780.	64.4	779.	779.	777.5	775.4
17.....	762.4	764.7	761.7	763.3	764.4	767.9	59.4	764.2	765.2	768.	766.
18.....	775.	774.3	775.	774.	775.7	776.5	67.	774.	.....	773.2	772.6
19.....	773.9	772.2	773.5	774.3	775.	776.2	69.4	779.5	776.4	775.	775.9
20.....	791.5	792.7	792.5	791.	791.	791.2	69.	791.5	790.9	791.6	792.
21.....	785.9	786.1	785.1	785.5	784.2	785.	62.4	786.2	788.2	790.7	790.2
22.....	798.2	797.6	800.7	801.8	802.5	802.3	65.	800.9	800.2	797.2	797.
23.....	801.	797.8	793.3	785.	786.	784.8	65.7	783.2	782.3	780.	781.
24.....	781.	780.2	781.8	785.	787.2	787.2	69.	789.	799.8	803.	801.7
25.....	802.	800.7	799.4	801.6	801.8	800.9	66.8	803.7	808.	816.7	797.6
26.....	778.8	779.7	779.7	780.	777.7	780.2	68.	780.3	780.	780.	781.2
27.....											
28.....											
29.....											
30.....											
31.....											
Means.....	772.6	773.3	773.1	772.8	772.4	772.5	68.	771.5	772.6	772.8	772.3
Reduced to 32° Fah....	682.1	682.9	682.8	682.6	682.3	682.5		681.7	683.	683.4	683.1

* One minute late.

FIRST MINIMUM OF HORIZONTAL FORCE—Continued.

OCTOBER.]

Göttingen time.....	h. m. 2 02 20 21½	Therm., Fah. 20 27½	h. m. 2 08 20 27½	h. m. 2 14 20 33½	h. m. 2 20 20 39½	h. m. 2 26 20 45½	h. m. 2 32 20 51½	Therm., Fah. 20 57½	h. m. 2 44 21 03½	h. m. 2 50 21 09½	h. m. 2 56 21 15½	Therm., Fah. 21 15½
Oct. 1.....	763.2	73.5	763.2	758.2	752.	749.	746.6	747.	749.1	753.2	757.6	72.8
3.....	731.4	74.	733.	732.	731.7	729.2	731.	735.5	734.	731.8	732.7	74.2
4.....	731.	68.6	731.	731.7	730.2	729.2	731.	735.5	734.	731.8	732.7	74.2
5.....	726.2	67.5	724.	724.	725.	724.	723.5	723.2	721.3	722.4	723.7	66.6
6.....	705.7	65.5	703.5	702.1	700.	702.7	701.5	699.5	704.7	700.8	695.2	65.5
7.....	749.	71.3	750.	751.6	751.5	752.9	754.	751.7	755.2	752.8	750.2	70.5
8.....	721.5	71.4	723.6	721.8	724.5	723.8	723.	723.4	724.	720.1	719.7	73.
10.....	772.5	66.	776.	774.2	775.	774.3	774.	776.6	776.8	776.5	776.9	65.
11.....	777.9	68.7	777.2	777.	777.4	777.5	777.3	777.4	777.	779.	777.2	68.1
12.....	777.	68.	775.7	777.1	779.2	779.7	778.	777.	777.4	777.2	780.	67.5
13.....	774.7	67.	777.4	779.5	780.	780.5	780.2	781.8	783.6	786.	789.	66.
14.....	789.1	68.5	785.8	783.2	783.	786.1	786.8	786.8	786.	786.7	786.	68.1
15.....	779.9	63.1	782.7	782.7	782.2	801.4	810.	811.9	811.	812.2	811.	62.3
17.....	810.1	68.5	805.3	808.5	806.	804.1	804.	803.	799.7	794.7	796.5	67.4
18.....	833.1	73.	830.	829.	826.2	825.4	812.5	809.	805.4	806.	808.3	72.4
19.....	773.3	64.3	772.	769.2	769.	770.8	770.6	769.4	767.8	768.5	767.9	64.
20.....	763.5	58.8	758.8	757.	757.2	754.	751.	759.4	752.2	751.	756.7	58.
21.....	774.5	66.8	775.2	777.3	777.2	772.1	774.6	775.3	775.2	774.4	773.5	66.4
22.....	777.	69.5	777.5	777.5	778.2	782.4	781.9	781.8	781.4	782.4	778.3	69.4
24.....	791.7	68.4	791.4	789.3	787.5	787.6	787.8	787.1	787.7	788.	787.	67.6
25.....	789.2	62.	789.2	785.	786.7	788.6	788.5	787.	787.	788.	786.5	61.3
26.....	794.8	65.	791.2	788.6	787.	786.5	784.	781.	780.4	781.5	780.	65.
27.....	781.	65.8	782.	784.2	786.	793.5	789.5	782.	783.2	788.7	782.2	66.
28.....	803.5	68.8	794.	792.4	797.7	800.7	803.7	803.4	803.2	800.3	799.3	68.4
29.....	808.5	66.	793.7	783.3	783.6	782.5	786.2	786.5	791.2	791.4	794.1	65.
31.....	781.5	68.	784.1	782.6	782.2	781.1	781.5	782.2	781.5	783.5	783.6	68.
Means.....	772.3	67.6	770.7	770.	770.2	772.4	772.1	771.7	772.2	770.3	770.2	67.2
Reduced to 32° Fah.....	683.3		681.8	681.2	681.5	683.8	683.6	683.3	683.9	682.1	683.3	

Corrected.]

SECOND MINIMUM OF HORIZONTAL FORCE.

[1842.]

	h. m. 15 32 9 51½	Therm., Fah.	h. m. 15 38 9 57½	h. m. 15 44 10 03½	h. m. 15 50 10 09½	h. m. 15 56 10 15½	h. m. 16 02 10 21½	Therm., Fah.	h. m. 16 08 10 27½	h. m. 16 14 10 33½	h. m. 16 20 10 39½	h. m. 16 26 10 45½
Göttingen time.....												
Observatory time.....												
Oct. 1.....	730.9	72.7	739.4	735.7	743.	745.4	743.	73.5	744.5	745.5	745.5	747.
3.....	.....	73.2	734.	731.5	734.5	733.	728.4	73.5	737.5	734.2	734.5	732.1
4.....	755.8	73.6	751.6	745.	745.6	745.1	741.1	72.8	736.	742.	740.9	741.1
5.....	733.2	68.8	730.3	732.7	734.4	733.8	733.1	69.3	731.7	731.9	730.1	727.
6.....	739.7	70.	742.	744.1	745.8	745.6	745.	70.	746.2	748.1	748.5	744.4
7.....	732.4	72.6	735.7	734.4	735.5	737.4	736.5	73.1	741.	740.	741.4	742.4
8.....	755.	67.6	754.5	751.5	751.	752.	753.3	68.	749.8	751.5	752.3	752.9
10.....	718.5	72.5	718.6	720.9	723.2	721.	726.3	72.8	726.7	728.2	729.5	728.3
11.....	792.5	68.7	794.	795.2	797.5	797.3	794.9	68.1	800.4	800.8	800.8	802.4
12.....	807.9	72.7	809.5	810.8	811.5	812.4	813.5	72.3	815.	817.1	818.3	817.2
13.....	807.7	69.5	808.2	807.5	810.3	816.7	815.5	69.4	821.	824.7	827.7	828.1
14.....	.....	68.7	830.	835.	837.9	838.8	839.8	68.7	*841.	843.5	843.2	845.7
15.....	798.6	71.1	798.2	798.2	798.2	802.7	802.1	70.	803.6	801.2	799.7	805.3
17.....	794.7	72.4	798.3	798.	801.2	804.3	810.	72.2	810.1	807.6	809.3	807.9
18.....	812.4	72.	813.8	816.6	817.7	816.5	811.1	72.3	813.	811.3	810.1	809.4
19.....	798.9	68.7	800.	802.4	806.2	802.4	801.2	68.4	802.7	800.7	803.6	803.9
20.....	814.1	69.8	814.1	814.3	814.7	816.2	816.3	69.6	816.3	816.	814.7	815.
21.....	800.4	65.9	803.4	804.	804.	802.1	803.2	66.	802.2	801.	799.7	800.2
22.....	797.8	65.7	797.3	798.2	795.8	796.4	795.5	65.8	795.5	794.6	795.1	794.9
24.....	806.1	66.9	803.	804.6	806.2	807.2	808.6	67.5	809.3	808.	809.4	810.8
25.....	835.1	71.9	835.1	837.2	840.	840.4	840.1	71.8	849.9	840.4	*840.1	839.9
26.....	795.7	65.7	797.2	798.5	799.2	797.8	799.	65.8	797.7	801.2	800.	801.1
27.....	788.2	65.7	788.5	788.5	780.8	776.8	767.3	65.2	767.8	770.2	769.	772.7
28.....	767.7	66.	770.7	772.8	772.5	772.1	774.6	66.5	773.9	772.9	774.8	774.
29.....	778.	66.8	780.7	778.5	775.7	777.	773.6	67.1	778.2	780.7	784.4	788.
31.....	793.7	67.	801.3	802.9	804.3	806.1	806.4	66.7	806.	804.4	802.6	805.2
Means.....	782.	69.5	782.7	782.9	784.1	784.5	784.1	69.5	784.7	785.3	785.6	786.
Reduced to 32° Fah.....	687.8		689.	689.2	690.4	690.8	690.4		691.	691.6	691.8	692.2

* One minute late.

[1842.]

FIRST MAXIMUM OF DECLINATION.

NOVEMBER.]

	h. m. 6 00 0 19½	h. m. 6 06 0 25½	h. m. 6 12 0 31½	h. m. 6 18 0 37½	h. m. 6 24 0 43½	h. m. 6 30 0 49½	h. m. 6 36 0 55½	h. m. 6 42 1 01½	h. m. 6 48 1 07½	h. m. 6 54 1 13½
Göttingen time.....	562.6	562.2	562.5	561.2	561.3	561.9	562.2	562.3	562.2	561.2
Observatory time.....	565.9	564.9	564.7	563.7	562.4	562.6	563.3	563.9	564.4	563.6
28 Nov. 1.....	562.7	562.3	561.8	562.8	561.8	564.3	561.4	547.3	546.1	552.2
2.....	562.1	562.5	562.5	562.3	562.4	562.1	562.3	561.7	562.5	562.4
3.....	566.	565.	564.1	563.5	562.6	562.1	563.2	564.4	564.	563.8
4.....	563.5	564.1	565.	565.4	565.4	566.8	565.8	566.	566.	565.9
5.....	562.3	561.3	561.5	562.5	561.7	560.7	562.1	562.9	562.9	563.1
6.....	566.	566.2	566.	566.3	566.5	566.	566.3	566.2	*566.	566.
7.....	576.2	577.1	577.	577.1	578.9	563.4	560.3	561.8	560.8	560.5
8.....	564.6	565.1	565.1	565.8	566.	566.5	566.2	564.1	564.1	563.8
9.....	565.9	566.4	566.8	566.3	564.7	.....	563.9	563.7	563.9	566.
10.....	564.7	564.5	564.7	564.9	564.4	564.5	564.5	564.8	565.2	565.9
11.....	565.9	565.2	564.7	565.5	565.6	565.8	565.2	565.5	565.2	.....
12.....	566.8	567.4	566.8	566.2	565.8	566.2	565.	566.	567.	566.2
13.....	561.4	560.6	565.5	565.8	565.2	565.	564.8	564.9	564.6	564.8
14.....	564.2	564.4	565.9	566.8	560.2	559.4	560.6	561.6	562.3	563.7
15.....	584.9	585.	589.8	596.6	595.4	597.5	598.2	599.2	597.3	592.2
16.....	562.9	560.9	560.1	559.9	560.	568.7	569.1	569.5	569.7	568.9
17.....	561.2	560.8	562.7	561.5	561.6	561.7	561.5	561.	561.1	560.9
18.....	566.2	566.7	565.8	565.9	564.5	563.7	563.	561.6	561.3	562.
19.....	563.5	563.2	562.8	563.7	564.	563.5	564.	563.8	564.4	563.8
20.....	563.5	564.1	563.8	563.7	563.9	563.7	563.7	563.9	564.1	563.9
21.....	565.5	566.	566.	566.2	566.5	566.	564.9	564.	563.	563.3
22.....	561.7	561.9	562.2	.....	.....	562.9	561.7	.....	.....	.....
Means.....	565.4	565.3	565.5	565.8	565.8	565.4	565.	564.8	564.	563.4

* One minute late.

[1843.]

FIRST MAXIMUM OF DECLINATION—Continued.

November.]

Göttingen time..... Observatory time.....	h. m. 7 00 1 19½	h. m. 7 06 1 25½	h. m. 7 12 1 31½	h. m. 7 18 1 37½	h. m. 7 24 1 43½	h. m. 7 30 1 49½	h. m. 7 36 1 55½	h. m. 7 42 2 01½	h. m. 7 48 2 07½	h. m. 7 54 2 13½
Nov. 1.....	562.1	562.	561.7	561.1	560.8	561.1	561.8	562.3	563.	563.2
2.....	564.3	564.	563.2	563.2	563.6	563.6	562.7	563.9	567.8	563.4
3.....	565.7	566.2	560.	568.	567.3	569.5	562.2	563.7	564.4	563.6
4.....	563.1	563.3	563.9	563.7	564.7	564.7	565.	565.8	566.2	565.5
5.....	564.	562.8	562.6	563.3	564.5	563.1	561.4	549.9	560.7	562.9
6.....	566.1	.....	565.5	565.2	.....	*565.4	565.6	*565.2	565.5	565.3
7.....	562.1	563.	563.6	564.	564.	566.	565.4	565.	564.5	563.9
8.....	565.7	565.7	565.4	565.	565.	564.6	564.4	564.9	565.4	566.6
9.....	560.	560.7	569.5	560.5	561.4	564.	564.	565.8	567.1	566.8
10.....	574.2	573.3	572.	570.5	570.6	570.7	572.2	574.	573.1	572.7
11.....	562.6	562.1	560.7	569.	569.4	560.	565.3	562.4	562.7	564.8
12.....	564.7	564.6	565.4	565.8	568.8	567.4	567.4	566.4	565.4	566.1
13.....	566.	566.3	566.7	566.5	566.3	566.3	566.1	565.6	565.9	565.4
14.....	565.	565.	565.2	564.7	565.6	563.8	564.6	565.6	565.7	566.6
15.....	565.8	565.2	565.1	564.8	565.6	565.6	565.7	565.2	564.8	564.1
16.....	564.6	564.1	564.4	564.1	564.1	564.3	564.7	564.5	564.4	564.6
17.....	561.3	564.	563.8	564.7	564.	562.9	562.7	562.2	561.6	561.6
18.....	543.4	546.9	550.4	553.9	555.9	558.7	.....	564.7	565.3	567.3
19.....	564.2	549.7	542.4	547.4	554.5	564.3	567.4	562.	562.	.....
20.....	554.9	560.	561.7	563.3	563.7	563.4	562.1	563.4	561.	563.
21.....	561.	561.5	560.5	561.1	560.8	560.9	560.8	561.1	560.8	560.7
22.....	561.2	561.6	561.4	561.5	562.	562.	561.9	562.2	562.1	562.3
23.....	563.4	563.2	563.1	563.3	563.5	564.	563.4	563.5	563.1	564.
24.....	564.1	564.1	563.6	563.8	564.1	564.3	564.9	564.8	565.2	564.5
25.....	562.6	559.7	566.7	563.6	561.4	563.1	564.4	567.1	569.9	561.1
26.....	*562.	*562.2	561.8	561.8	562.5	.....	561.1	561.3	561.1	561.2
Means.....	562.6	562.1	562.	561.8	562.1	562.	562.1	562.9	562.7	563.

* One minute late.

NOVEMBER.]

SECOND MAXIMUM OF DECLINATION.

[1942.]

Göttingen time.....	h. m. 18 00	h. m. 18 06	h. m. 18 12	h. m. 18 18	h. m. 18 24	h. m. 18 30	h. m. 18 36	h. m. 18 42	h. m. 18 48	h. m. 18 54
Observatory time.....	h. m. 12 19½	h. m. 13 26½	h. m. 13 31½	h. m. 13 37½	h. m. 13 43½	h. m. 13 49½	h. m. 13 55½	h. m. 14 01½	h. m. 14 07½	h. m. 14 13½
Nov. 1	556.2	556.	555.7	555.3	555.	555.2	554.8	554.6	554.8	555.
2	553.5	552.7	552.9	552.6	552.8	552.8	552.7	553.1	553.	553.
3	552.	551.	550.4	550.5	550.1	548.8	548.	547.8	547.7	545.6
4	556.1	556.2	556.	556.3	556.8	555.5	555.6	555.	554.7	554.5
5	559.5	558.	557.5	557.	556.5	556.	556.	556.1	556.7	556.7
6	555.7	555.5	555.4	555.	555.4	555.	554.6	554.6	554.8	555.
7	559.	558.5	558.5	557.2	557.2	557.	557.	557.4	557.	557.6
8	558.2	557.6	557.7	557.7	557.	556.5	557.4	557.1	557.	557.5
9	550.4	550.2	550.	550.2	550.	550.8	552.2	552.3	552.2	553.7
10	556.7	556.6	556.5	557.1	556.8	556.5	556.3	556.8	556.5	557.1
11	558.2	558.3	557.4	558.2	557.5	557.7	557.2	557.9	557.2	557.5
12	558.2	560.	559.3	558.6	558.6	558.7	559.7	559.1	559.1	558.5
13	559.5	559.4	558.8	559.6	559.7	559.9	559.	559.5	559.5	558.1
14	552.5	552.1	552.5	552.6	552.7	552.8	552.7	553.9	553.	553.6
15	554.7	555.	555.5	555.5	555.8	556.2	556.5	556.6	555.7	556.3
16	556.2	556.3	557.9	556.5	554.9	556.2	554.5	555.6	555.4	556.4
17	555.2	555.	554.4	554.2	554.	554.1	553.8	553.3	553.2	552.9
18	556.6	556.6	556.8	556.	555.9	556.1	555.	555.	555.3	556.
19	556.	554.8	556.	556.	555.9	556.	554.2	553.6	554.4	554.
20	561.	561.2	559.7	560.	558.7	559.5	559.1	558.5	558.4	557.7
21	563.8	564.2	566.	566.	566.	566.9	567.	566.6	567.8	567.8
22	560.9	560.6	560.7	559.5	558.9	567.9	568.2	568.2	567.6	567.4
23	558.5	558.7	558.1	558.1	558.	557.9	557.6	557.6	557.6	557.7
24	560.8	561.	560.6	560.5	560.6	560.9	561.	560.5	560.6	560.6
25	559.4	558.4	558.8	559.	559.3	559.5	559.4	559.5	559.1	558.9
26	554.	553.4	553.6	554.	554.3	555.	554.7	554.9	555.5	555.8
Means.....	556.6	556.4	556.3	556.3	555.9	555.9	555.9	555.9	555.9	555.9

November.]

FIRST MINIMUM OF DECLINATION.

[1842.]

[97]

760

Göttingen time Observatory time.	<i>h. m.</i> 2 00 20 19½	<i>h. m.</i> 2 06 20 25½	<i>h. m.</i> 2 12 20 31½	<i>h. m.</i> 2 18 20 37½	<i>h. m.</i> 2 24 20 43½	<i>h. m.</i> 2 30 20 49½	<i>h. m.</i> 2 36 20 55½	<i>h. m.</i> 2 42 21 01½	<i>h. m.</i> 2 48 21 07½	<i>h. m.</i> 2 54 21 13½
Nov. 1.....	563.2	563.1	563.	563.	563.1	563.2	563.	563.7	563.	563.3
2.....	563.7	564.5	566.	568.1	567.9	568.	568.	567.1	566.5	564.8
3.....	565.8	566.3	566.	565.4	565.7	565.7	565.4	565.	.....	566.7
4.....	562.7	563.	563.5	562.5	562.9	562.4	562.2	563.	563.4	563.6
5.....	566.9	566.	566.7	566.	566.1	566.8	566.7	565.7	566.2	566.5
6.....	565.	566.2	567.1	566.6	567.	566.9	566.	566.7	566.1	566.7
7.....	566.8	566.9	566.9	566.	566.1	566.6	567.	566.3	567.2	567.6
8.....	579.	574.	570.7	568.5	567.4	568.5	567.7	569.4	571.5	572.4
9.....	573.	569.4	568.	569.7	569.7	568.7	569.6	570.3	574.5	577.7
10.....	567.1	566.	566.	566.4	567.1	568.2	567.	566.7	566.5	567.6
11.....	570.	565.7	566.5	565.7	564.5	565.	565.	564.7	565.	565.5
12.....	565.2	565.2	566.	565.4	565.2	566.	564.7	564.5	564.4	564.
13.....	566.	565.7	560.2	566.	567.	565.3	.....	566.2	566.	.....
14.....	566.6	567.7	567.1	567.	567.	567.2	566.2	566.	567.	567.1
15.....	568.7	565.5	564.7	565.5	565.5	565.7	565.2	564.4	565.	565.2
16.....	564.8	563.5	566.1	564.6	565.1	564.	565.	563.6	564.5	564.8
17.....	563.4	563.6	564.6	567.	566.3	566.1	564.6	570.	564.5	564.4
18.....	562.8	576.1	580.	588.5	585.5	587.	587.9	575.	586.7	580.2
19.....	565.8	564.8	563.5	566.	565.	566.	566.	564.3	567.2	563.4
20.....	570.5	570.	567.1	567.3	567.	566.4	565.9	565.8	565.4	565.4
21.....	566.9	566.1	567.	566.	567.	566.2	566.6	566.8	566.4	565.7
22.....	564.	564.	563.9	564.2	564.	563.5	563.6	563.3	564.	563.5
23.....	563.	563.8	563.6	563.6	563.4	564.	563.8	563.7	563.9	563.6
24.....	563.5	563.2	563.8	562.9	563.6	562.1	563.	563.	562.1	562.1
25.....	563.6	564.	563.4	562.7	563.7	563.	562.6	562.3	563.1	562.8
26.....	562.5	563.9	563.2	562.8	564.3	564.1	565.5	565.6	564.2	563.5
Means.....	566.	566.1	566.	566.5	566.9	566.5	566.6	566.1	566.8	566.8

[1842.]

FIRST MINIMUM OF DECLINATION—Continued.

November.]

	<i>h.</i> 3 00 21 19½	<i>m.</i> 3 06 21 25½	<i>h.</i> 3 12 21 31½	<i>m.</i> 3 18 21 37½	<i>h.</i> 3 24 21 43½	<i>m.</i> 3 30 21 49½	<i>h.</i> 3 36 21 55½	<i>m.</i> 3 42 22 01½	<i>h.</i> 3 48 22 07½	<i>m.</i> 3 54 22 13½
Getting time.....										
Observatory time.....										
Nov. 1.....	565.1	564.5	564.	564.2	564.	563.4	563.3	562.5	562.5	562.3
2.....	563.5	564.3	564.	563.3	563.6	563.6	562.5	562.5	562.3	562.5
3.....	566.1	565.6	564.7	565.5	565.5	565.5	565.8	565.2	565.6	565.
4.....	563.4	564.6	565.7	564.7	564.3	564.1	564.1	563.5	563.4	563.3
5.....	565.7	565.6	565.8	565.6	565.5	565.5	565.9	567.5	568.5	567.7
6.....	565.3	566.2	566.	565.4	565.7	565.	566.	567.5	566.	566.6
7.....	567.2	566.5	566.5	567.	566.5	566.5	567.	567.2	567.4	567.1
8.....	572.2	572.1	573.	573.3	576.9	581.5	581.9	581.7	585.7	589.8
9.....	576.6	575.	575.5	577.2	575.5	571.4	569.	569.	569.6	569.7
10.....	567.	568.2	566.7	568.4	568.1	568.	566.7	567.2	566.9	567.5
11.....	565.5	566.	566.	565.2	565.4	565.	565.	565.4	565.	564.9
12.....	564.2	564.4	564.7	565.	565.2	565.	564.8	565.5	565.7	565.5
13.....	.....	.....	.....	.....	.....	.....	563.	565.2	565.7	565.5
14.....	.....	.....	.....	.....	.....	.....	567.4	567.4	566.7	566.2
15.....	567.4	567.5	567.4	567.	567.4	567.4	567.3	567.	566.6	566.6
16.....	565.	564.5	565.2	565.2	565.2	565.3	565.2	565.1	565.4	564.5
17.....	564.	.....	564.6	564.	564.6	565.9	565.	563.5	563.2	563.3
18.....	565.2	564.4	.....	560.9	561.4	569.4	553.7	548.	548.9	553.8
19.....	569.	568.3	578.5	576.8	588.4	592.4	590.8	590.2	598.7	607.6
20.....	566.2	566.	566.1	566.	566.6	565.5	566.5	567.5	566.8	566.8
21.....	564.1	563.9	564.5	563.6	563.9	562.9	563.8	564.4	562.7	563.1
22.....	567.	564.8	564.5	565.8	566.	565.	565.3	564.5	565.1	564.1
23.....	564.5	566.8	568.1	568.5	567.5	565.6	564.4	562.7	562.4	562.4
24.....	563.5	563.4	563.	563.4	563.4	563.	562.5	562.9	562.3	562.4
25.....	562.5	563.	562.7	562.6	563.	563.7	564.8	564.2	564.8	563.4
26.....	563.1	563.1	562.1	562.7	562.1	562.7	561.9	561.9	561.8	562.
27.....	564.7	565.9	565.	565.2	565.	564.7	563.9	563.2	564.3	563.9
Means.....	566.7	566.9	566.6	566.3	566.8	566.7	566.2	566.	566.4	567.

November.]

SECOND MINIMUM OF DECLINATION.

[1842.]

[97]

782

	<i>h. m.</i> 13 00 7 19½	<i>h. m.</i> 13 06 7 25½	<i>h. m.</i> 13 12 7 31½	<i>h. m.</i> 13 18 7 37½	<i>h. m.</i> 13 24 7 43½	<i>h. m.</i> 13 30 7 49½	<i>h. m.</i> 13 36 7 55½	<i>h. m.</i> 13 42 8 01½	<i>h. m.</i> 13 48 8 07½	<i>h. m.</i> 13 54 8 13½
Göttingen time.....										
Observatory time										
Nov. 1.....	568.3	568.9	567.6	567.3	567.5	568.	568.7	569.2	569.6	570.9
2.....	570.1	569.9	569.7	569.4	568.5	568.8	568.7	568.6	568.4	570.3
3.....	568.2	570.5	571.	569.4	571.5	568.3	569.7	571.5	570.4	571.7
4.....	571.2	570.4	569.1	569.6	570.3	570.1	571.	571.6	570.9	571.2
5.....	568.7	567.7	568.5	569.1	568.8	569.8	569.1	569.	570.6	570.8
6.....	570.7	571.4	571.7	573.	572.5	572.9	571.9	571.3	572.2	573.3
7.....	568.3	568.3	568.8	569.5	570.4	570.5	572.	572.4	572.6	573.6
8.....	569.	569.2	571.	571.9	571.8	571.2	571.5	570.8	570.7	571.4
9.....	545.6	549.6	550.7	553.1	553.5	555.8	559.1	560.7	561.7	562.4
10.....	568.9	568.2	567.5	567.3	567.7	568.4	568.7	567.5	570.1	570.
11.....	573.1	572.2	569.8	567.8	569.1	568.9	569.5	568.1	569.9	570.5
12.....	570.6	569.9	571.3	571.5	570.	569.	570.7	570.	570.1	570.3
13.....	569.5	570.3	570.7	569.6	570.5	569.5	569.5	568.7	568.1	567.6
14.....	569.6	571.5	571.3	569.2	567.8	569.1	568.8	570.1	571.8	571.8
15.....	568.3	567.9	568.1	568.3	567.9	569.1	568.9.	568.3	568.	568.4
16.....	568.8	569.4	570.5	570.5	570.5	571.1	570.9	571.2	570.9	571.2
17.....	570.4	570.3	571.	572.1	571.7	570.	569.	569.7	570.	570.
18.....	568.9	569.4	570.6	571.3	571.5	570.5	569.9	569.7	568.	567.7
19.....	.....	568.6	561.	558.2	555.	551.5	549.4	549.5	545.5	544.7
20.....	573.9	572.6	571.7	571.1	571.2	571.3	571.1	570.7	570.6	570.4
21.....	563.9	565.7	565.9	566.5	566.9	567.5	566.9	567.2	567.8	567.4
22.....	564.	564.4	564.3	567.5	565.4	565.	564.7	566.	568.8	566.5
23.....	565.6	565.9	566.	566.7	566.2	566.2	566.3	566.5	566.6	566.
24.....	563.	562.8	562.7	562.4	561.3	562.5	562.8	563.	562.1	563.1
25.....	560.	558.6	558.7	559.	559.2	561.3	561.8	562.8	563.6	563.8
26.....	.....	.....	.....	564.5	563.2	562.5	561.9	563.4	562.	561.3
27.....										
28.....										
29.....										
30.....										
Means.....	567.4	567.8	567.6	567.5	567.3	567.2	567.3	567.6	567.7	567.9

November.]

MAXIMUM OF VERTICAL FORCE.

[1842.]

	<i>h. m.</i> 23 04 16 23½	Therm., Fah.	<i>h. m.</i> 23 10 16 29½	<i>h. m.</i> 23 16 16 35½	<i>h. m.</i> 23 22 16 41½	<i>h. m.</i> 23 28 16 47½	<i>h. m.</i> 23 34 16 53½	Therm., Fah.	<i>h. m.</i> 23 40 16 59½	<i>h. m.</i> 23 46 17 05½	<i>h. m.</i> 23 52 17 11½	<i>h. m.</i> 23 58 17 17½
Göttingen time.....												
Observatory time.....												
Nov. 1.....	789.2	72.2	788.8	788.	787.2	786.5	786.	72.	785.	785.	784.3	784.
2.....	779.	73.	779.2	779.2	780.2	780.2	781.	73.3	781.	783.	784.	785.
3.....	758.	70.2	753.4	752.8	752.5	751.	750.5	70.	750.	749.7	749.5	750.6
4.....	737.4	68.	736.5	737.	735.	735.	733.2	67.1	732.7	731.4	731.3	730.3
5.....	713.1	67.	712.9	712.	712.2	711.	711.	66.6	709.5	709.	708.6	708.
6.....	766.2	70.	765.2	765.2	763.8	763.8	764.4	69.5	763.	762.	761.	759.5
7.....	775.5	70.	775.	775.	775.	775.	774.	70.	772.8	771.1	770.	769.
8.....	786.	70.	786.2	785.5	784.5	783.7	783.	69.5	780.7	778.9	776.7	775.4
9.....	717.9	65.8	717.	717.	715.5	715.	714.1	65.4	713.7	713.	711.7	710.
10.....	690.9	64.2	690.2	690.	690.	689.6	688.8	64.	688.	687.9	687.	686.5
11.....	715.8	64.7	714.5	713.	712.1	711.	709.7	64.6	708.1	707.9	707.	706.
12.....	745.	69.1	745.5	746.	746.5	748.	749.	69.1	749.5	749.5	750.	749.3
13.....	730.7	68.2	731.2	733.	733.7	735.	736.8	68.6	737.4	737.7	739.5	740.
14.....	707.	66.	708.	709.2	710.8	712.5	714.8	67.6	716.3	715.	731.1	723.
15.....	743.	67.	742.	741.6	741.	741.	741.2	67.7	741.7	741.7	742.	743.
16.....	692.5	63.	692.1	691.5	691.	691.	690.4	63.2	691.	690.	690.5	690.1
17.....	690.2	63.2	688.7	688.4	687.2	686.4	685.6	61.4	685.	683.6	682.6	680.8
18.....	664.1	61.3	664.	662.	661.	659.	658.	61.	656.3	655.	653.6	651.
19.....	674.	64.	677.	679.2	682.	684.	686.5	65.2	688.1	690.4	693.	696.
20.....	806.	75.	807.	807.7	807.3	808.	808.2	74.5	808.9	808.5	807.9	807.9
21.....	707.2	65.3	706.9	706.	706.	706.2	706.	65.4	705.8	707.	708.	709.
22.....	704.2	66.	706.	704.4	704.1	704.	704.	65.9	703.6	704.	704.5	706.
23.....	752.7	69.7	752.	752.6	751.9	751.4	751.1	69.	750.1	749.6	749.	748.3
24.....	627.	57.	624.6	623.1	623.2	621.	618.9	56.6	618.	616.7	616.	615.
25.....	666.	62.	665.7	665.5	666.	666.	667.	66.	667.7	668.2	669.	670.5
26.....	643.5	60.5	642.7	643.	643.8	644.2	645.	61.5	647.	649.	650.9	652.9
Means.....	722.2	66.6	722.	721.9	721.7	721.5	721.4	66.7	721.2	721.1	721.1	721.
Reduced to 32° Fah.	254.7		254.3	253.9	253.5	253.	252.7		252.2	251.8	251.5	251.1

November.]

MAXIMUM OF VERTICAL FORCE—Continued.

[1842.]

[97]

784

Göttingen time..... Observatory time.....	A. m. 23 04 17 23½	Therm., Fah.	A. m. 23 10 17 29½	A. m. 23 16 17 35½	A. m. 23 22 17 41½	A. m. 23 28 17 47½	A. m. 23 34 17 53½	Therm., Fah.	A. m. 23 40 17 59½	A. m. 23 46 18 05½	A. m. 23 52 18 11½	A. m. 23 58 18 17½	Therm., Fah.
Nov. 1.....	783.7	71.6	783.	783.	782.	782.	781.9	71.5	781.3	781.	781.	779.5	71.4
2.....	786.	73.5	786.5	787.4	787.7	787.7	789.	73.7	789.	789.2	790.1	790.5	73.8
3.....	751.	70.	751.	751.1	751.1	751.1	752.8	70.	753.	753.9	755.	756.1	70.
4.....	730.	67.	729.5	728.7	728.3	728.3	728.	67.	729.	729.	729.	729.	67.
5.....	707.	65.5	706.	705.7	705.	704.	703.	65.3	702.5	701.3	701.	699.2	65.
6.....	759.	68.5	756.2	754.	754.	753.	751.5	68.5	750.	750.	749.	747.5	68.5
7.....	767.8	68.2	767.	765.	763.9	762.6	761.8	67.9	758.7	757.1	756.8	754.	67.5
8.....	773.7	69.	773.	771.	769.	767.2	766.	68.8	764.5	763.7	763.	761.7	68.7
9.....	709.7	65.	708.7	708.2	707.	707.1	708.	65.	708.	708.	707.2	706.2	65.
10.....	686.	63.8	686.	685.	686.	684.	684.	63.9	683.9	683.6	683.	682.7	64.
11.....	705.8	65.	704.	704.	704.	704.	703.9	65.5	704.1	704.5	704.5	706.2	66.
12.....	750.5	68.7	750.2	750.	750.	750.5	749.5	68.4	749.	749.	749.	747.5	68.
13.....	742.	69.5	742.	743.7	744.2	746.	747.	69.8	749.	751.	753.7	756.2	70.
14.....	726.	69.3	728.	731.7	733.5	738.4	738.2	69.6	741.	743.	744.7	746.2	69.8
15.....	743.8	68.8	744.7	747.	748.	749.7	751.2	69.9	753.8	756.	759.	760.	71.
16.....	699.7	63.8	691.	690.9	691.1	692.	692.	64.6	693.	694.4	695.2	697.	65.
17.....	679.1	60.8	678.6	677.3	678.2	675.2	673.7	60.8	672.3	670.9	669.5	668.5	60.9
18.....	648.7	60.	647.1	646.	643.7	640.5	639.	60.3	637.	637.	637.	636.8	60.6
19.....	807.	73.	807.	806.	804.5	804.5	803.2	72.7	803.	803.	802.5	802.4	72.5
20.....	710.2	66.2	711.	711.9	712.9	713.5	714.4	66.4	715.5	716.	716.4	717.2	66.5
21.....	708.5	67.1	708.	709.5	711.1	711.7	713.	67.4	712.5	713.9	716.5	716.4	67.8
22.....	747.3	68.	746.3	745.5	743.7	742.7	741.5	67.6	740.1	739.	737.4	738.2	67.2
23.....	614.5	58.	614.5	615.1	616.	616.3	617.2	58.2	617.7	618.2	618.1	619.	58.3
24.....	672.	67.3	672.	673.9	674.6	676.	676.5	66.	679.	680.	681.	681.7	64.
25.....	654.5	63.5	657.8	658.8	662.	663.7	*666.	64.9	667.	670.7	675.	678.2	66.2
Means.....	721.1	66.8	731.	721.5	721.2	721.4	721.5	66.9	721.7	722.	722.4	722.5	67.
Reduced to 32° Fah.	250.9		250.6	251.	250.5	250.6	250.5		250.5	250.5	250.7	250.5	

* Three minutes late.

† One minute late.

NOVEMBER.]

MINIMUM OF VERTICAL FORCE.

[1843.]

	h. m. 12 34 6 53†	Therm., Fah.	h. m. 13 40 6 59†	h. m. 12 46 7 05†	h. m. 13 52 7 11†	h. m. 12 59 7 17†	h. m. 13 04 7 23†	Therm., Fah.	h. m. 13 10 7 29†	h. m. 13 16 7 35†	h. m. 13 22 7 41†	h. m. 13 28 7 47†
Getting time	773.	69.3	771.7	†770.4	768.9	768.	767.3	69.	765.6	764.6	763.6	761.8
Observatory time	788.3	71.	787.5	787.7	787.4	786.2	785.1	70.5	783.9	783.3	782.1	781.3
1	785.4	61.5	785.	783.	782.	780.5	779.6	66.3	787.4	784.6	782.1	781.8
2	706.	65.1	705.7	704.9	704.	703.5	702.4	65.1	701.2	700.1	699.7	698.6
3	730.7	67.9	730.7	731.	731.3	731.	731.1	67.9	731.1	731.1	731.	731.4
4	†748.2	68.2	748.	747.7	747.6	747.7	747.2	68.2	747.1	746.6	746.2	745.9
5	772.9	69.8	775.	776.4	775.	774.2	774.	70.2	773.6	773.1	772.7	772.7
6	773.	71.2	778.4	778.8	779.	779.	780.	71.6	780.	780.6	781.2	781.5
7	712.2	62.8	711.2	707.7	706.1	702.5	699.1	62.	696.	694.2	691.2	689.1
8	712.1	64.8	711.4	713.2	711.8	710.6	708.9	64.8	706.9	706.2	704.	703.
9	748.7	67.9	746.4	743.	744.	743.9	742.6	67.9	742.3	741.5	741.7	741.3
10	741.	67.4	740.8	740.3	740.8	740.5	†740.2	67.	739.5	738.7	738.2	737.7
11	740.9	66.	741.	740.9	741.	737.8	734.9	65.6	733.9	730.4	726.4	727.
12	681.	62.6	673.	678.4	677.4	676.5	676.	63.	675.	674.9	674.	673.8
13	763.2	69.7	762.6	763.1	762.7	763.4	762.5	69.4	761.9	761.4	761.1	760.4
14	809.3	72.3	810.	810.	813.6	813.3	811.5	71.7	809.4	807.1	807.2	805.6
15	718.	64.4	718.7	717.6	714.8	713.2	712.	63.	711.7	708.	705.6	703.7
16	689.6	63.3	691.	691.2	691.1	690.5	690.2	63.4	689.	686.4	686.4	686.1
17	668.4	60.	668.	668.	667.9	669.	667.6	59.	665.2	663.2	660.7	659.2
18	727.6	64.4	727.7	728.2	728.6	725.2	723.1	64.	719.8	716.2	712.5	710.3
19	755.	69.	754.2	753.9	754.7	755.	755.5	68.6	755.8	757.2	757.7	758.2
20	746.2	67.6	745.5	744.1	743.3	742.3	741.4	67.3	740.1	739.7	739.5	738.8
21	723.9	67.5	723.7	723.9	723.5	723.9	723.7	67.6	723.6	724.	724.1	724.4
22	646.1	59.2	643.9	641.7	643.9	641.7	640.9	59.	640.	639.2	638.7	638.3
23	620.	59.1	621.4	623.6	626.5	626.5	626.5	59.5	626.6	623.6	623.4	623.2
24	643.7	58.	642.1	641.7	640.9	†639.8	†638.7	58.	†637.6	†636.5	†635.3	633.
Mean.	726.1	65.7	725.6	725.4	725.2	724.5	723.7	65.7	722.7	721.7	720.7	719.8
Reduced to 32° Fah.	270.4		269.9	269.8	269.6	269.	268.2		266.7	265.1	263.5	263.

* Supplied.

† Two minutes late.

‡ One minute late.

[1842.]

MINIMUM OF VERTICAL FORCE—Continued.

NOVEMBER.]

Göttingen time. Observatory time.	h. m. 13 34 7 53½	Therm., Fah.	h. m. 13 40 8 0½	h. m. 13 53 8 11½	h. m. 13 58 8 17½	h. m. 14 04 8 23½	Therm., Fah.	h. m. 14 10 8 29½	h. m. 14 16 8 35½	h. m. 14 22 8 41½	h. m. 14 29 8 47½	Therm., Fah.
Nov. 1.	760.2	68.9	759.3	758.	757.5	757.6	70.3	758.1	758.8	761.4	763.2	71.
2.	780.8	70.8	780.3	780.1	780.5	780.5	71.5	778.7	780.	780.3	780.9	71.5
3.	717.	66.3	715.	713.	712.	712.	68.	712.	712.2	713.	715.	69.5
4.	698.7	65.8	698.	699.3	700.5	702.3	66.6	704.	705.6	707.	708.2	67.4
5.	*731.1	68.2	731.	731.4	731.	731.3	68.6	731.8	732.5	734.6	736.	69.1
6.	744.5	68.1	744.1	743.1	742.7	742.1	68.1	742.	742.1	742.6	742.5	68.1
7.	778.3	70.6	775.6	777.	778.2	780.	71.8	782.	783.7	786.	788.	73.2
8.	792.9	72.	783.2	783.9	785.	787.5	72.5	788.1	789.7	790.6	792.2	72.8
9.	866.9	62.5	865.	862.	861.1	860.6	62.9	860.2	861.1	861.6	862.	64.3
10.	701.8	64.8	701.2	700.8	700.7	701.4	66.	702.1	703.3	705.	707.	67.1
11.	741.	68.5	741.	741.	742.	742.5	69.	743.5	745.	746.2	747.8	69.3
12.	736.9	67.3	735.7	735.1	734.5	736.3	67.5	735.5	736.7	737.4	738.6	68.7
13.	725.5	65.4	720.6	719.2	717.	715.7	66.1	714.4	714.	714.2	715.1	67.7
14.	673.9	63.7	674.8	676.2	677.	679.2	65.1	681.3	683.	686.2	688.7	66.4
15.	760.5	69.2	759.8	759.4	758.9	759.	68.9	758.5	759.	758.9	758.5	68.3
16.	804.4	71.1	802.7	801.3	799.4	798.4	70.7	795.	794.1	792.9	792.5	69.4
17.	699.7	62.5	697.6	695.	690.	688.6	62.	687.5	686.	685.2	683.2	62.
18.	685.7	62.3	684.5	683.5	682.9	683.3	62.2	682.7	683.	682.4	682.	62.4
19.	656.4	59.	655.7	653.2	653.	651.2	59.2	650.7	650.	648.4	647.8	59.9
20.	707.9	63.9	704.7	703.2	702.4	700.7	64.4	700.4	699.8	699.6	699.3	64.7
21.	758.4	70.2	758.7	760.	761.7	764.	70.9	763.7	765.7	767.5	768.9	71.2
22.	797.	67.8	796.2	795.3	794.3	793.4	67.8	792.5	792.5	792.3	792.5	68.6
23.	723.2	67.8	723.2	723.3	723.1	722.7	67.9	723.	723.	723.6	721.6	67.6
24.	698.9	59.8	698.5	698.5	698.9	699.4	60.1	640.7	642.	644.	646.2	61.
25.	636.3	60.5	637.	639.6	641.	642.2	61.7	643.5	645.6	647.5	649.8	62.6
26.	630.4	58.	628.	624.7	616.9	609.9	55.7	606.8	602.3	596.4	595.2	54.5
Means	719.	65.9	718.2	717.6	717.	716.9	66.4	716.9	717.3	717.8	718.6	66.9
Reduced to 32° Fah.	260.6		259.7	257.	254.2	253.		251.3	250.	248.7	247.7	

* Three minutes late.

† One minute late.

November.]

FIRST MAXIMUM OF HORIZONTAL FORCE.

[1843.

Göttingen time. Observatory time.	A. m. 11 33 5.51½	Therm., Fah.	A. m. 11 36 5.57½	A. m. 11 44 6.03½	A. m. 11 50 6.09½	A. m. 11 56 6.15½	A. m. 12 02 6.21½	Therm., Fah.	A. m. 12 08 6.27½	A. m. 12 14 6.33½	A. m. 12 20 6.39½	A. m. 12 26 6.45½	Therm., Fah.
Nov. 1		66.	774.1	772.9	773.2	773.5	771.5	65.5	770.5	769.2	767.2	767.6	65.1
2	765.4	67.7	764.7	762.	*763.	761.2	762.6	67.5	763.7	764.5	765.2	767.4	67.2
3	769.8	61.3	769.1	769.5	769.9	764.6	769.2	63.7	774.4	775.6	775.6	768.7	63.2
4	756.5	60.3	767.3	756.5	756.5	758.	751.7	60.2	755.	755.4	753.6	755.6	60.2
5	763.7	62.6	760.5	759.9	755.9	755.4	754.4	62.7	757.4	757.3	757.3	758.4	62.9
6	764.6	64.3	762.	753.8	755.8	755.	752.7	64.4	*754.7	754.6	754.9	753.9	64.5
7	766.5	66.7	771.4	*770.7	771.1	771.4	771.6	66.6	773.	772.9	773.7	776.1	66.5
8	769.	67.6	761.	760.9	760.4	761.5	761.2	67.5	761.6	762.5	762.7	763.	67.7
9		69.8		801.	794.6	790.1	794.6	59.5	761.5	775.2	770.9	770.9	58.8
10		61.		775.4	773.8	767.2	768.7	60.7	765.9	768.3	770.2	772.9	60.5
11		63.7		775.5	777.4	774.9	776.	63.7	780.	780.7	781.9	784.9	63.4
12	775.1	63.7	776.6	775.5	777.4	770.	770.2	62.2	771.3	769.4	769.8	770.8	62.3
13	*770.6	62.3	768.2	768.9	768.9	778.9	776.9	62.	775.9	775.8	775.7	775.3	61.8
14	775.4	62.3	778.	780.7	780.7	778.9	776.9	62.	775.9	775.8	775.7	775.3	61.8
15	774.6	59.2	773.3	773.8	775.9	773.6	771.7	59.5	771.8	768.8	*764.5	763.7	59.3
16	783.	64.7	785.7	783.2	782.4	782.1	780.4	64.5	778.	782.2	783.7	784.	64.7
17	800.8	69.8	799.	798.3	794.4	792.8	791.1	69.7	786.9	787.7	789.8	791.6	69.5
18	741.6	59.	739.5	739.2	738.5	738.9	739.4	58.	744.1	743.4	*743.8	744.2	58.
19	755.3	56.7	752.2	752.	753.6	756.	748.6	56.8	749.7	746.6	746.7	745.5	56.8
20	777.5	57.4	779.	777.7	780.2	780.4	778.9	56.7	777.1	776.8	776.7	779.2	55.8
21	788.2	61.7	*788.2	787.2	788.7	791.2	792.3	60.5	794.5	789.7	789.4	787.9	59.
22	784.8	66.4	784.8	784.3	783.3	780.5	778.1	63.4	779.7	776.7	780.6	782.1	63.5
23	775.6	62.1	775.6	776.4	777.8	775.7	775.3	61.9	776.3	776.1	774.2	776.1	61.4
24	777.1	61.5	774.9	767.5	768.7	768.	771.5	61.8	768.2	767.9	767.9	769.2	61.7
25	736.5	51.8	735.2	734.	739.4	740.6	736.5	51.9	734.9	741.4	737.9	739.9	52.4
26	750.	53.4	747.9	746.8	746.1	748.1	746.	52.7	743.8	753.4	749.7	748.5	52.9
27	750.8	55.	749.	746.6	745.4	745.9	746.1	54.7	745.3	744.5	744.4	745.5	54.
Mean.	764.3	61.6	766.3	768.2	767.9	767.5	766.4	61.5	766.7	766.8	766.4	767.	61.3
Reduced to 32° Fah.	690.7		692.1	694.2	694.	693.7	692.7		693.2	693.4	693.1	693.8	

† Two minutes late.

* One minute late.

NOVEMBER.]

SECOND MAXIMUM OF HORIZONTAL FORCE.

[1842.]

[97]

188

Göttingen time..... Observatory time.....	h. m. 21 03 16 21½	Therm., Fah.	h. m. 21 08 15 27½	h. m. 21 14 15 33½	h. m. 21 20 15 39½	h. m. 21 26 15 45½	h. m. 21 32 15 51½	Therm., Fah.,	h. m. 21 38 15 57½	h. m. 21 44 16 03½	h. m. 21 50 16 09½	h. m. 21 56 16 15½
Nov. 1.....	786.2	69.2	786.7	787.9	787.2	787.2	786.1	68.7	785.	784.2	785.	781.2
2.....	775.7	68.6	778.4	781.9	782.4	782.5	801.5	68.6	803.5	806.7	811.	809.5
3.....	778.7	68.5	779.	781.5	.....	789.7	788.6	66.3	786.7	787.5	786.5	787.5
4.....	.....	64.3	767.1	765.3	766.4	766.	765.4	64.2	766.1	768.5	766.7	765.2
5.....	766.2	64.	766.	765.2	765.2	764.	764.	64.	763.5	763.2	761.5	764.2.
7.....	780.	68.	778.5	780.6	779.7	780.5	779.7	67.8	773.7	778.3	777.6	777.5
8.....	778.	66.5	777.	775.5	777.2	776.2	780.	66.5	773.7	776.2	773.2	776.
9.....	792.7	68.	788.1	787.5	787.6	791.5	791.6	68.	786.5	793.8	788.5	792.
10.....	807.2	62.2	800.5	793.8	789.7	788.	787.5	61.4	787.	786.3	792.2	788.1
11.....	782.3	61.	781.	782.7	782.3	777.	778.	61.	777.8	780.3	779.7	781.7
12.....	795.7	62.4	792.	792.5	793.2	789.1	790.	62.	789.1	789.5	788.4	790.4
14.....	779.5	63.9	773.4	776.2	779.7	775.	774.2	61.5	774.	776.8	776.9	777.9
15.....	765.8	61.8	767.2	766.3	766.5	765.1	765.5	62.	763.7	765.2	765.5	767.7
16.....	786.8	61.5	785.	783.	782.	779.7	778.7	61.7	773.7	775.7	774.3	774.
17.....	787.	64.3	789.5	786.3	786.2	787.7	785.	64.	783.3	779.4	782.5	782.2
18.....	766.5	59.7	763.7	765.7	767.5	763.9	761.5	58.8	759.1	751.2	751.	751.2
19.....	737.5	58.3	736.2	739.4	736.5	732.6	736.3	58.5	735.2	735.2	732.7	732.8
21.....	789.7	57.	791.2	793.5	797.	799.6	801.5	56.7	799.6	799.6	804.2	801.9
22.....	781.7	57.1	781.2	780.	779.7	*777.5	779.5	57.6	779.5	783.2	779.5	779.5
23.....	797.	66.5	799.2	797.	797.2	794.5	789.2	67.	794.5	793.7	790.2	791.5
24.....	786.3	60.4	787.8	784.	786.6	789.	790.3	60.	790.8	789.2	789.2	786.5
25.....	786.8	61.2	786.2	786.5	788.	786.3	784.5	61.	784.7	786.5	780.5	780.1
26.....	779.5	64.6	778.	778.7	780.7	778.5	779.6	64.6	782.	783.	782.2	780.1
27.....	757.	53.8	754.4	754.3	753.5	754.8	753.5	52.8	753.1	754.5	753.1	749.5
29.....	755.7	55.2	752.2	748.7	749.2	740.7	746.2	55.	749.	745.	751.2	748.2
30.....	773.2	54.	771.	769.5	768.5	766.5	766.7	54.	768.4	767.7	771.2	776.5
Means.....	779.	62.3	777.6	777.1	777.3	776.7	777.1	62.3	777.1	776.9	776.8	776.8
Reduced to 32° Fah.....	703.5		702.	701.4	701.6	701.	701.4		701.5	701.4	701.4	701.6

* One minute late.

[1842.]

SECOND MAXIMUM OF HORIZONTAL FORCE—Continued.

November.]

Göttingen time..... Observatory time.....	<i>h. m.</i> 22 02 16 21½	Therm., Feb.	<i>h. m.</i> 22 08 16 27½	<i>h. m.</i> 22 14 16 33½	<i>h. m.</i> 22 20 16 39½	<i>h. m.</i> 22 26 16 45½	<i>h. m.</i> 22 32 16 51½	Therm., Feb.	<i>h. m.</i> 22 38 16 57½	<i>h. m.</i> 22 44 17 03½	<i>h. m.</i> 22 50 17 09½	<i>h. m.</i> 22 56 17 15½	Therm., Feb.
Nov. 1.....	783.	68.6	782.3	782.7	783.	781.7	781.7	68.8	780.5	779.3	778.4	778.6	68.9
2.....	809.2	69.	809.	802.7	803.7	804.2	804.4	69.5	804.	802.2	797.7	800.6	70.
3.....	794.7	66.	798.8	801.4	800.7	797.	794.2	66.	794.	795.7	800.5	795.2	66.
4.....	763.7	64.	766.	764.3	764.	764.2	763.7	64.	762.7	762.	769.1	760.7	64.
5.....	762.8	64.	765.2	765.5	766.	764.2	765.	64.	762.2	763.	762.	762.2	64.
6.....	779.	67.	778.6	776.9	777.	776.	776.2	66.9	774.7	775.9	774.4	775.7	66.8
7.....	773.5	66.	773.3	772.2	772.2	774.	773.4	66.	773.	770.5	768.7	771.2	66.
8.....	793.5	66.5	794.8	794.7	794.5	791.2	790.2	66.	783.7	788.6	791.	789.	65.5
9.....	788.	61.7	791.	789.	788.4	795.	794.2	61.8	794.7	794.6	796.7	799.2	61.9
10.....	781.1	60.8	783.	784.	781.	793.2	798.	60.5	801.8	799.5	798.9	794.3	60.2
11.....	786.9	61.6	788.5	787.2	784.7	783.1	780.7	61.5	779.7	780.7	780.7	775.7	61.4
12.....	777.2	64.8	776.7	779.2	777.1	776.	775.5	64.9	775.5	775.5	778.7	777.	65.
13.....	767.2	63.	766.5	770.2	768.5	760.	766.9	63.5	766.5	767.2	766.6	762.7	64.
14.....	773.2	62.	773.5	770.5	771.	769.	770.	63.	772.7	769.2	773.6	772.	63.8
15.....	782.7	63.8	780.2	779.7	779.2	778.	773.9	63.8	777.5	776.5	774.7	775.2	63.8
16.....	751.3	58.3	750.2	757.5	758.	757.	750.	58.1	765.	762.	762.8	751.2	58.
17.....	734.4	58.	737.2	737.8	737.	740.	741.5	56.8	743.	742.3	741.6	739.5	56.5
18.....	802.5	56.5	804.7	808.2	808.	810.5	819.	56.3	817.7	822.2	823.7	827.	56.1
19.....	778.	58.	777.5	785.5	788.	783.5	785.2	58.1	783.	780.4	777.	779.7	58.2
20.....	795.5	67.	797.7	798.7	793.4	796.2	795.2	67.	798.	799.	800.2	798.2	67.
21.....	786.3	59.7	786.6	786.4	785.2	787.	785.2	59.4	785.4	784.	784.5	783.	59.2
22.....	783.5	61.1	782.2	779.5	783.	782.1	780.7	61.2	782.7	781.8	782.7	782.4	61.9
23.....	784.7	64.3	785.6	784.5	781.4	785.	784.1	63.8	783.2	782.5	780.6	784.	63.5
24.....	747.3	51.5	749.5	745.5	746.	745.5	746.5	51.2	746.8	744.5	744.5	746.4	51.
25.....	742.2	55.	746.	748.2	747.2	747.7	744.	55.	743.	746.2	744.5	746.5	55.
26.....	775.7	54.2	770.7	775.	778.	776.2	760.3	55.3	783.6	782.6	781.7	783.	56.
Means.....	776.9	62.	777.6	778.	777.6	777.6	777.5	62.	777.9	777.6	777.5	777.3	62.1
Reduced to 32° Fah.....	701.9		702.6	703.	702.6	702.6	702.5		702.9	702.5	702.4	702.1	

NOVEMBER.]

FIRST MINIMUM OF HORIZONTAL FORCE.

[1842.]

[97]

790

Göttingen time..... Observatory time.....	<i>h. m.</i> 1 02 19 21½	<i>Therm.,</i> Feb.	<i>h. m.</i> 1 08 19 27½	<i>h. m.</i> 1 14 19 33½	<i>h. m.</i> 1 20 19 39½	<i>h. m.</i> 1 26 19 45½	<i>h. m.</i> 1 32 19 51½	<i>Therm.,</i> Feb.	<i>h. m.</i> 1 38 19 57½	<i>h. m.</i> 1 44 20 03½	<i>h. m.</i> 1 50 20 09½	<i>h. m.</i> 1 56 20 15½
Nov. 1.....	778.5	69.	779.2	777.4	780.	779.6	780.	69.	781.8	783.	784.2	783.7
2.....	794.2	70.3	792.7	791.7	792.9	794.7	795.9	70.3	795.5	792.5	792.	792.
3.....	778.3	66.2	778.4	778.7	778.	775.7	776.2	66.	772.5	773.4	772.8	774.
4.....	760.2	64.	759.7	759.2	760.5	760.5	759.5	64.1	759.1	760.7	761.2	759.2
5.....	762.8	61.8	763.5	763.8	765.5	764.4	764.5	64.2	764.7	764.2	763.5	762.7
6.....	772.6	66.2	773.	772.	772.2	772.9	772.7	66.	773.5	774.4	774.	774.
7.....	767.6	64.2	768.4	768.	768.8	766.9	767.5	64.	764.	746.5	751.8	753.1
8.....	806.	63.5	805.5	807.	809.7	813.	812.7	63.	808.4	804.7	802.7	802.7
9.....	806.	60.8	807.	809.8	807.4	808.	807.	60.5	809.	811.7	812.6	808.3
10.....	780.	61.	779.	782.7	782.3	780.8	782.	61.1	781.2	780.8	778.2	781.
11.....	795.2	62.5	801.4	806.7	800.2	801.7	797.5	62.7	797.5	797.5	792.5	788.8
12.....	780.	63.	780.	780.	778.5	780.2	776.3	62.9	777.3	777.3	777.2	777.7
13.....	765.9	66.5	767.2	768.	768.	770.5	771.	66.5	772.	773.	771.5	772.5
14.....	775.5	64.8	775.5	777.4	777.7	777.2	776.5	64.9	777.2	775.	774.3	776.5
15.....	780.4	67.8	777.4	778.	778.5	778.4	776.1	68.	778.	776.2	777.7	781.
16.....	749.2	59.8	755.	751.2	750.5	752.5	752.1	59.4	749.2	752.5	748.7	750.2
17.....	761.1	57.3	776.5	782.3	781.3	783.7	759.3	58.	758.	755.8	756.2	757.2
18.....	836.2	55.6	855.2	862.7	847.5	845.4	850.2	55.2	838.	806.7	827.	830.5
19.....	786.5	60.5	787.4	781.2	786.4	788.6	779.3	60.5	780.4	786.	785.	789.2
20.....	804.6	65.7	810.	810.7	809.	806.	804.1	65.6	802.3	802.7	804.	804.5
21.....	781.	59.8	777.7	778.5	780.6	776.7	783.4	59.5	784.	784.2	781.	782.2
22.....	785.7	62.3	784.4	786.7	787.	787.	787.5	62.2	787.7	788.	786.	788.8
23.....	783.	63.7	783.3	785.3	785.	784.8	781.3	63.9	787.4	787.2	786.8	786.
24.....	785.7	61.5	761.	760.2	747.2	750.5	746.5	61.8	748.5	748.5	749.2	743.
25.....	757.7	58.2	756.5	757.2	755.2	754.7	754.5	58.	756.7	756.5	754.4	751.7
26.....	784.	59.4	785.	785.	786.	782.5	785.1	59.	788.9	787.2	787.7	786.2
Means.....	780.2	62.4	781.9	782.	781.4	781.4	780.9	62.4	780.4	778.8	778.9	779.1
Reduced to 32° Fah.....	704.2		705.9	706.	705.4	705.4	704.9		704.5	703.	703.1	703.4

NOVEMBER.]

FIRST MINIMUM OF HORIZONTAL FORCE—Continued.

[1842.

Göttingen time..... Observatory time.....	<i>h. m.</i> 2 02 20 21½	Therm., Fah.	<i>h. m.</i> 2 08 20 27½	<i>h. m.</i> 2 14 20 33½	<i>h. m.</i> 2 20 20 39½	<i>h. m.</i> 2 26 20 45½	<i>h. m.</i> 2 32 20 51½	Therm., Fah.	<i>h. m.</i> 2 38 20 57½	<i>h. m.</i> 2 44 21 03½	<i>h. m.</i> 2 50 21 09½	<i>h. m.</i> 2 56 21 15½	Therm., Fah.
Nov. 1	785.8	69.	784.8	784.1	783.	781.4	785.	69.	783.2	785.	784.5	783.7	69.
2	792.5	70.	792.6	791.5	792.7	793.1	794.	70.	785.9	793.8	799.	799.5	70.
3	773.	65.7	773.2	775.2	774.5	773.	772.5	65.4	772.2	773.	774.	774.	65.1
4	780.2	64.	782.7	782.4	782.7	783.	784.6	64.	786.5	781.8	784.	785.2	64.
5	763.1	64.	762.7	762.4	762.7	763.	764.6	63.8	763.4	763.6	763.6	763.3	63.6
6	775.2	65.8	775.3	774.8	775.2	774.5	776.	65.6	776.2	776.3	777.5	778.	65.4
7	754.7	61.	757.	756.2	758.	754.6	755.4	61.	756.6	756.	756.5	755.4	61.
8	802.	62.6	797.5	788.	794.5	782.2	778.	62.2	775.2	771.	789.	776.	62.
9	810.2	60.6	810.5	807.4	802.9	803.5	806.6	60.7	801.1	797.2	795.2	788.9	60.8
10	780.2	61.1	780.	781.2	776.7	780.	778.2	61.1	774.5	779.2	778.5	775.	61.1
11	781.	63.	780.	780.8	780.5	775.1	780.7	63.3	778.5	775.1	776.2	778.7	63.5
12	779.	62.6	777.	777.6	774.3	775.2	774.4	62.3	774.1	770.5	773.7	772.5	62.
13	772.7	66.2	772.2	772.5	777.	771.8	774.7	66.	774.	756.	.....	.....	65.8
14	776.7	65.5	773.	776.	778.7	779.5	777.7	66.	778.6	781.2	777.	777.5	66.4
15	780.7	68.4	782.5	778.2	782.	779.2	785.5	68.8	783.	775.7	785.	781.5	69.
16	748.9	58.8	749.	747.7	747.2	752.7	750.8	58.4	747.	749.9	749.3	752.4	58.
17	760.8	58.8	762.1	761.3	763.6	760.7	769.5	59.	774.1	759.8	764.	767.9	59.
18	848.	55.	845.5	854.7	851.7	843.	841.5	54.8	839.2	847.6	853.	848.5	54.6
19	785.4	60.	786.3	791.	775.7	785.7	783.7	59.5	784.6	784.8	785.2	785.7	59.1
20	801.7	65.	799.6	798.5	799.5	802.7	801.6	64.5	800.7	799.8	798.7	799.	64.6
21	780.	59.	779.	781.7	785.5	783.5	784.2	58.5	786.2	782.4	788.1	785.7	58.
22	787.8	62.2	789.3	780.2	789.1	787.3	791.	62.5	788.4	791.2	789.6	794.	62.7
23	787.3	63.2	788.4	787.6	786.	785.	786.	63.7	786.4	785.6	784.9	785.7	64.1
24	745.5	53.	743.5	744.	750.2	744.5	749.7	52.2	752.2	754.5	756.	755.9	52.4
25	756.	55.3	754.	749.7	752.4	755.5	749.2	55.	746.5	753.7	753.2	751.7	54.8
26	787.5	57.5	787.1	784.7	785.7	782.7	785.4	56.7	786.6	785.4	783.7	785.3	56.
Means.....	779.8	62.3	779.4	779.	778.9	778.2	779.2	62.2	777.9	777.5	779.1	779.2	62.1
Reduced to 32° Fah.....	704.1		703.7	703.4	703.3	702.7	703.7		702.5	702.1	703.8	704.	

November.]

SECOND MINIMUM OF HORIZONTAL FORCE.

[1842.

[97]

792

Nov.	Göttingen time.....	Observatory time.....	Therm.,		h. m.		h. m.		h. m.		h. m.		h. m.		h. m.	
			Fah.		15 38		15 44		15 50		15 56		16 02		16 08	
Nov.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	787.7	783.3	782.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2	786.2
	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3	783.3
	781.	781.	781.	781.	781.	781.	781.	781.	781.	781.	781.	781.	781.	781.	781.	781.
	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5	771.5
	780.8	780.8	780.8	780.8	780.8	780.8	780.8	780.8	780.8	780.8	780.8	780.8	780.8	780.8	780.8	780.8
	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1
	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6	803.6

	814.3	814.3	814.3	814.3	814.3	814.3	814.3	814.3	814.3	814.3	814.3	814.3	814.3	814.3	814.3	814.3
	806.	806.	806.	806.	806.	806.	806.	806.	806.	806.	806.	806.	806.	806.	806.	806.
	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2	810.2
	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3	791.3
	787.1	787.1	787.1	787.1	787.1	787.1	787.1	787.1	787.1	787.1	787.1	787.1	787.1	787.1	787.1	787.1
	788.7	788.7	788.7	788.7	788.7	788.7	788.7	788.7	788.7	788.7	788.7	788.7	788.7	788.7	788.7	788.7
	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8
	817.	817.	817.	817.	817.	817.	817.	817.	817.	817.	817.	817.	817.	817.	817.	817.
	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7	763.7
	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5	765.5
	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6	795.6
	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1	786.1
	804.1	804.1	804.1	804.1	804.1	804.1	804.1	804.1	804.1	804.1	804.1	804.1	804.1	804.1	804.1	804.1
	786.6	786.6	786.6	786.6	786.6	786.6	786.6	786.6	786.6	786.6	786.6	786.6	786.6	786.6	786.6	786.6
	777.6	777.6	777.6	777.6	777.6	777.6	777.6	777.6	777.6	777.6	777.6	777.6	777.6	777.6	777.6	777.6
	749.	749.	749.	749.	749.	749.	749.	749.	749.	749.	749.	749.	749.	749.	749.	749.
	744.7	744.7	744.7	744.7	744.7	744.7	744.7	744.7	744.7	744.7	744.7	744.7	744.7	744.7	744.7	744.7
	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1
Means.....	785.5	785.5	785.5	785.5	785.5	785.5	785.5	785.5	785.5	785.5	785.5	785.5	785.5	785.5	785.5	785.5
Reduced to 32° Fah..	711.6	711.6	711.6	711.6	711.6	711.6	711.6	711.6	711.6	711.6	711.6	711.6	711.6	711.6	711.6	711.6

* Five minutes late.

† Two minutes late.

NOVEMBER.]

SECOND MINIMUM OF HORIZONTAL FORCE.—Continued.

[1842.

Göttingen time Observatory time	h. m. 16 32 10 51½	Therm., -Fah.	h. m. 16 38 10 57½	h. m. 16 44 11 03½	h. m. 16 50 11 09½	h. m. 16 56 11 15½	h. m. 17 02 11 21½	Therm., Fah.	h. m. 17 08 11 27½	h. m. 17 14 11 33½	h. m. 17 20 11 39½	h. m. 17 26 11 45½	Therm., Fah.
Nov. 1.....	788.8	67.2	788.8	789.8	789.3	791.7	791.7	67.9	792.6	792.	791.2	791.5	68.4
2.....	778.	67.6	775.2	779.	778.7	777.	777.7	67.7	778.6	776.9	779.5	779.5	67.8
3.....	764.3	66.4	770.3	768.9	770.5	769.8	776.1	66.4	777.5	777.7	782.8	782.8	66.4
4.....	784.4	62.7	782.8	781.5	782.4	786.3	783.7	63.2	785.6	786.	786.1	786.1	63.3
5.....	782.3	63.6	786.2	785.5	787.	787.	786.9	63.7	787.	787.2	787.3	788.	64.
6.....	795.2	66.	793.5	795.2	796.3	797.2	797.7	66.4	796.8	797.	797.1	797.3	66.6
7.....	798.3	69.3	799.1	801.1	800.2	799.6	800.1	69.5	798.9	797.6	797.7	797.6	69.3
8.....	805.	68.6	803.7	805.2	806.7	805.4	804.2	69.	803.	804.	801.	799.1	69.4
9.....	819.1	61.3	812.	811.	811.2	808.3	.....	61.5	807.1	806.5	807.5	.....	61.7
10.....	822.1	61.8	817.9	818.	812.8	810.8	809.7	61.7	809.1	809.8	808.3	.....	61.7
11.....	801.9	63.	805.2	806.	805.2	805.5	806.	63.7	806.4	803.5	804.5	803.7	64.1
12.....	792.4	63.	791.	792.	792.7	793.	792.1	63.	790.6	791.2	791.4	790.5	63.
13.....	792.7	63.8	793.6	791.	792.6	790.9	791.6	63.6	789.7	790.7	789.	.....	63.4
14.....	796.4	62.3	795.5	794.	794.5	795.1	794.8	62.2	796.9	796.2	798.	797.3	62.3
15.....	802.7	64.5	802.7	802.7	802.7	803.2	803.5	64.5	803.6	802.5	804.5	800.7	64.3
16.....	815.8	67.8	816.5	811.3	815.4	813.8	815.2	67.6	814.7	814.	.....	.....	67.4
17.....	767.8	55.9	766.	766.9	764.3	761.	765.8	56.2	763.8	766.5	766.7	.....	56.4
18.....	770.2	58.4	770.2	770.9	773.7	773.8	775.4	56.5	773.6	772.	771.1	770.8	56.5
19.....	787.7	56.5	791.5	791.	791.2	786.9	791.	57.3	792.	788.7	789.4	789.5	57.8
20.....	802.2	61.4	804.9	801.2	800.2	803.2	804.1	61.9	803.8	802.2	800.3	801.6	62.1
21.....	825.7	63.4	826.	826.5	829.	829.6	830.2	62.9	830.3	825.7	825.7	820.	62.7
22.....	797.3	63.7	800.3	801.1	803.5	804.	806.2	64.	807.9	808.4	808.5	808.6	63.5
23.....	780.	61.3	777.3	782.4	780.	781.3	806.2	62.2	785.1	785.4	783.5	787.1	62.8
24.....	753.8	55.	753.6	753.5	753.9	754.9	757.1	55.2	*757.1	757.2	757.2	758.1	55.4
25.....	756.1	55.6	759.6	760.3	758.4	758.7	762.5	56.1	762.	762.	760.7	761.3	56.1
26.....	780.	45.3	775.2	768.8	771.5	772.8	771.	45.6	772.3	774.7	771.4	769.5	47.
Means.....	790.8	62.1	790.7	790.6	790.9	790.9	791.1	62.3	791.7	791.4	790.4	790.3	62.4
Reduced to 32° Fah.....	715.6		715.4	715.2	715.4	715.3	715.4		715.2	715.6	715.	714.8	

* Supplied.

[1842.]

SECOND MINIMUM OF HORIZONTAL FORCE.

November.]

Göttingen time..... Observatory time.....	<i>h. m.</i> 15 32 9 51½	Therm., Fah.	<i>h. m.</i> 15 38 9 57½	<i>h. m.</i> 15 44 10 03½	<i>h. m.</i> 15 50 10 09½	<i>h. m.</i> 15 56 10 15½	<i>h. m.</i> 16 02 10 21½	Therm., Fah.	<i>h. m.</i> 16 08 10 27½	<i>h. m.</i> 16 14 10 33½	<i>h. m.</i> 16 20 10 39½	<i>h. m.</i> 16 26 10 45½
Nov. 1.....	787.7	66.	786.2	786.3	787.7	785.9	787.8	66.3	788.5	788.2	786.8	786.
2.....	783.3	67.5	782.1	780.4	779.3	778.7	779.3	67.5	778.6	779.5	779.6	780.5
3.....	781.	66.3	787.7	791.5	785.	.....	774.	68.4	772.	770.8	768.2	767.5
4.....	771.5	61.9	774.5	777.4	775.	774.3	775.	68.1	774.	778.7	780.3	781.
5.....	780.8	62.7	780.3	780.5	788.	784.6	783.1	63.	784.5	781.7	781.6	785.1
6.....	786.1	65.4	786.5	790.2	786.4	789.7	791.8	65.7	791.7	792.4	794.4	795.7
7.....	803.6	69.6	800.2	801.8	802.	800.	800.2	69.2	799.4	800.8	801.	800.
8.....	.....	69.1	802.5	803.	804.8	803.2	805.	69.4	805.3	806.5	806.1	805.6
9.....	814.3	60.8	833.9	833.	837.3	841.	840.8	61.	831.8	829.7	821.5	821.3
10.....	806.	62.	807.5	805.3	805.8	808.4	809.2	61.9	812.3	819.	824.6	825.
11.....	810.2	63.4	811.1	810.3	810.6	811.5	812.6	63.	807.7	806.5	805.7	802.5
12.....	791.3	63.5	789.7	788.7	789.8	791.5	791.2	63.	791.2	791.3	790.	791.3
13.....	787.1	64.	785.8	789.4	791.2	785.	788.6	64.	793.5	790.2	791.2	793.2
14.....	783.7	62.7	788.5	789.5	790.1	792.2	792.1	62.6	795.5	796.6	797.	796.6
15.....	798.8	64.2	802.3	803.5	802.4	803.4	801.6	64.3	803.5	804.5	801.9	802.3
16.....	817.	67.8	817.7	816.5	817.	817.7	817.1	68.	815.8	817.9	817.5	815.8
17.....	765.5	56.7	765.8	768.2	765.8	768.5	766.7	56.1	765.7	766.1	766.5	767.6
18.....	763.7	56.5	765.8	767.5	769.7	772.	771.8	56.7	772.5	773.7	771.	766.5
19.....	795.6	55.3	793.4	802.	805.	804.	802.3	55.7	794.6	795.6	790.9	787.8
20.....	786.1	60.4	788.2	786.7	786.4	793.2	803.3	60.9	793.	794.1	798.9	796.4
21.....	804.1	64.3	804.8	805.	806.3	803.8	808.8	64.	816.	817.7	819.	821.8
22.....	786.6	63.1	787.1	790.1	789.5	790.5	790.7	63.3	792.5	794.7	795.5	798.5
23.....	777.6	60.7	780.1	779.3	779.	780.6	780.6	60.7	780.3	780.3	780.	779.6
24.....	749.	53.6	761.5	752.	752.2	749.2	746.6	54.5	752.5	753.	753.4	753.7
25.....	744.7	55.	760.6	756.	755.4	753.6	753.7	55.4	750.7	755.1	752.1	755.7
26.....	762.1	50.4	763.4	766.6	761.2	757.	769.6	50.	.....	.....	.....	.....
Means.....	785.5	62.	787.8	789.2	789.3	789.7	789.7	62.1	790.5	791.3	791.	790.9
Reduced to 32° Fah.....	711.8		713.8	714.2	714.2	715.	714.5		714.	714.8	714.5	714.4

* Five minutes late.

† Two minutes late.

[1842.]

SECOND MINIMUM OF HORIZONTAL FORCE—Continued.

NOVEMBER.]

Göttingen time Observatory time	<i>h. m.</i> 16 32 10 51½	Therm., Fah.	<i>h. m.</i> 16 38 10 57½	<i>h. m.</i> 16 44 11 03½	<i>h. m.</i> 16 50 11 09½	<i>h. m.</i> 16 56 11 15½	<i>h. m.</i> 17 02 11 21½	Therm., Fah.	<i>h. m.</i> 17 08 11 27½	<i>h. m.</i> 17 14 11 33½	<i>h. m.</i> 17 20 11 39½	<i>h. m.</i> 17 26 11 45½	Therm., Fah.
100 Nov. 1.....	788.8	67.2	788.8	789.8	789.3	791.7	791.7	67.9	792.6	792.	791.2	791.5	68.4
2.....	778.	67.6	775.2	779.	776.7	777.	777.7	67.7	778.6	776.9	779.5	779.5	67.8
3.....	764.3	66.4	770.3	768.9	770.5	769.8	776.1	66.4	777.5	777.7	782.8	782.8	66.4
4.....	784.4	62.7	782.8	781.5	782.4	786.3	783.7	63.2	785.6	786.	786.1	786.1	63.3
5.....	782.3	63.6	786.2	785.5	787.	787.	786.9	64.	787.	789.2	787.3	788.	64.
6.....	795.2	66.	793.5	795.2	796.3	797.2	797.7	66.4	796.8	797.	797.1	797.3	66.6
7.....	798.3	69.3	799.1	801.1	800.2	799.6	800.1	69.5	798.9	797.6	797.7	797.6	69.3
8.....	805.	68.6	803.7	805.2	806.7	805.4	804.2	69.	803.	804.	801.	799.1	69.4
9.....	819.1	61.3	812.	811.	811.2	808.3	.....	61.5	807.1	806.5	807.5	.....	61.7
10.....	822.1	61.8	817.9	818.	812.8	810.8	809.7	61.7	809.1	809.8	808.3	.....	61.7
11.....	801.9	63.	805.2	806.	805.2	805.5	806.	63.7	806.4	803.5	804.5	803.7	64.1
12.....	792.4	63.	791.	792.	792.7	792.	792.1	63.	790.5	791.2	791.4	790.5	63.
13.....	792.7	63.8	793.6	791.	792.6	790.9	791.6	63.6	789.7	790.7	789.	.....	63.4
14.....	796.4	62.3	795.5	794.	794.5	795.1	794.8	62.2	796.9	796.2	798.	797.3	62.3
15.....	802.7	64.5	802.7	802.7	802.7	803.2	803.5	64.5	803.5	802.5	804.5	800.7	64.3
16.....	815.8	67.8	816.5	811.3	815.4	813.8	815.2	67.6	814.7	814.	.....	.....	67.4
17.....	767.8	55.9	766.	766.9	764.3	764.	765.8	56.2	763.8	766.5	768.7	.....	56.4
18.....	770.2	56.4	770.2	770.9	773.7	773.8	775.4	56.5	773.8	772.	771.1	770.8	56.5
19.....	787.7	56.5	791.5	791.	791.2	786.9	791.	57.3	792.	788.7	789.4	789.5	57.8
20.....	802.2	61.4	804.9	801.2	800.2	803.2	804.1	61.9	803.8	802.2	800.3	801.6	62.1
21.....	825.7	63.4	826.	826.5	829.	829.6	830.2	62.9	830.3	825.7	825.7	820.	62.7
22.....	797.3	63.7	800.3	801.1	803.5	804.1	806.2	64.	807.9	808.4	808.5	808.6	63.5
23.....	780.	61.3	777.3	782.2	780.	781.3	782.2	62.2	785.1	785.4	783.5	787.1	62.8
24.....	763.8	55.	753.6	753.5	753.9	754.9	757.1	55.2	*757.1	757.2	757.2	758.1	55.4
25.....	756.1	55.6	759.6	760.3	758.4	756.7	762.5	56.1	762.	762.	760.7	761.3	56.1
26.....	780.	45.3	775.2	768.8	771.5	772.8	771.	45.6	772.3	774.7	771.4	769.5	47.
Means.....	790.8	62.1	790.7	790.6	790.9	790.9	791.1	62.3	791.7	791.4	790.4	790.3	62.4
Reduced to 32° Fah.....	715.6		715.4	715.2	715.4	715.3	715.4		715.2	715.6	715.	714.8	

* Supplied.

Decimals.]

FIRST MAXIMUM OF DECLINATION.

[1842.]

[97]

794

Göttingen time.....	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Observatory time.....	6 00	6 06	6 12	6 18	6 24	6 30	6 36	6 42	6 48	6 54	7 00	7 06
	0 19½	0 25½	0 31½	0 37½	0 43½	0 49½	0 55½	1 01½	1 07½	1 13½		
Dec. 1.....	562.8	562.9	562.9	562.7	562.1	562.1	562.9	562.7	562.3	562.7	562.7	562.7
2.....	563.	563.1	563.5	562.7	562.2	562.9	562.9	563.	562.6	562.1	562.1	562.1
3.....	560.7	560.9	560.7	561.	560.8	560.4	560.1	560.	560.5	560.4	560.4	560.4
4.....	562.	561.5	561.1	561.3	560.8	560.5	560.3	560.2	560.5	560.4	560.4	560.4
5.....	561.9	563.1	563.	563.6	564.1	564.4	565.3	564.7	564.	564.4	562.8	562.8
6.....	564.5	564.5	563.6	563.9	563.7	563.6	563.6	563.3	563.8	564.4	564.4	564.4
7.....	561.7	561.8	561.5	561.6	562.4	561.7	561.9	561.7	561.8	561.6	561.6	561.6
8.....	568.7	560.3	560.7	562.2	562.7	561.5	561.1	560.	560.3	560.8	560.8	560.8
9.....	563.7	563.7	563.3	564.4	562.7	563.4	563.	564.	562.2	562.	562.	562.
10.....	562.5	562.2	562.3	562.	562.	561.9	561.9	561.9	562.2	562.	562.	562.
11.....	564.	563.9	563.9	563.7	564.1	563.3	563.5	563.2	563.3	564.6	564.6	564.6
12.....	562.6	563.	562.8	562.8	563.3	562.3	562.4	562.	561.6	561.2	561.2	561.2
13.....	564.6	*562.9	562.4	562.6	562.7	562.3	562.4	562.	561.6	561.2	561.2	561.2
14.....	.....	.....	.....	.....	.....	563.	562.4	561.6	562.	562.	562.	562.
15.....	.....	.....	.....	.....	.....	563.6	563.4	561.8	562.	562.	562.	562.
16.....	.....	.....	.....	.....	.....	563.5	564.3	564.3	563.6	563.6	563.6	563.6
17.....	564.5	564.	563.6	563.5	564.5	564.3	564.3	564.3	563.6	563.6	563.6	563.6
18.....	559.5	559.5	560.5	560.1	560.	559.5	559.7	560.2	560.	560.	560.	560.
19.....	556.5	556.2	558.	558.6	558.3	558.	558.	557.1	557.2	557.2	557.2	557.2
20.....	559.2	559.3	559.	558.5	559.1	559.	558.7	558.	558.4	557.4	557.4	557.4
21.....	561.2	560.	560.6	560.2	560.7	561.	560.1	560.5	561.1	561.1	561.1	561.1
22.....	563.6	563.	562.3	562.2	562.	561.9	561.8	562.4	561.6	560.4	560.4	560.4
23.....	560.8	560.5	560.	560.	560.2	560.2	561.6	560.3	560.6	560.6	560.6	560.6
24.....	560.2	560.1	559.8	559.6	558.8	559.3	559.3	558.9	559.9	559.5	559.5	559.5
25.....	562.8	561.8	561.1	561.5	561.4	560.6	560.6	560.6	561.8	562.	562.	562.
26.....	564.2	564.2	563.6	563.8	563.	562.	561.6	561.3	561.	560.8	560.8	560.8
27.....	559.4	558.6	558.5	558.8	559.9	559.2	559.4	559.3	558.7	558.6	558.6	558.6
28.....	560.8	561.6	559.8	557.9	557.4	558.7	558.1	558.6	559.	558.2	558.2	558.2
29.....	558.7	557.8	558.8	561.3	561.9	562.4	562.1	562.	561.8	562.	562.	562.
30.....	561.7	561.6	561.5	561.5	561.6	561.5	561.5	561.3	561.3	561.3	561.3	561.3
31.....	561.7	561.6	561.5	561.5	561.6	561.5	561.5	561.3	561.3	561.3	561.3	561.3
Means.....	561.7	561.6	561.5	561.5	561.6	561.5	561.5	561.3	561.3	561.3	561.3	561.3

* One minute late.

[1842.]

FIRST MAXIMUM OF DECLINATION—Continued.

DECEMBER.]

Göttingen time.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Observatory time.	7 00	7 06	7 12	7 18	7 24	7 30	7 36	7 42	7 48	7 54	h. m.
Dec. 1	562.3	562.5	562.5	562.1	562.4	562.6	563.	563.	562.4	561.8	561.8
2	561.7	561.8	561.2	561.5	560.6	560.6	561.1	561.6	561.8	561.6	561.6
3	560.5	560.	560.	560.	559.8	560.3	560.4	560.5	560.8	560.9	560.9
5	560.6	560.9	560.8	560.	560.	560.8	561.7	560.6	559.7	559.6	559.6
6	563.3	563.4	561.9	561.	562.4	564.3	564.4	567.6	570.5	571.4	571.4
7 . . . . .	.....	.....	563.7	564.7	.....	.....	.....	562.4	562.	564.2	564.2
8	560.5	560.8	561.4	561.6	561.6	561.6	562.5	561.9	559.2	557.4	557.4
9	559.2	559.8	559.9	559.	560.	561.2	561.1	561.6	562.9	562.6	562.6
10	562.2	563.2	562.9	562.5	563.2	564.5	564.	563.8	564.	563.4	563.4
12	561.7	561.6	561.2	561.8	561.1	561.3	562.	560.7	560.8	560.9	560.9
13	562.8	564.6	564.9	563.4	*563.5	+563.3	562.5	563.6	562.8	562.6	562.6
14	564.8	564.5	563.4	561.9	.....	559.1	559.7	558.5	556.8	556.4	556.4
15	561.5	561.4	561.3	561.7	+561.	561.	560.8	559.9	.....	561.4	561.4
16	561.7	561.8	562.7	562.6	562.1	562.5	561.	561.6	561.4	561.2	561.2
17	563.2	562.	562.7	561.8	561.	560.9	560.3	560.8	562.4	561.8	561.8
19	559.7	559.4	559.7	558.9	558.7	558.9	559.5	559.6	560.	560.5	560.5
20	566.3	558.	567.2	567.5	567.4	568.2	558.3	558.3	558.5	558.	558.
21	557.6	558.	558.2	559.	559.3	559.9	558.2	557.9	557.7	558.1	558.1
22	560.9	561.3	560.8	561.	559.8	560.9	560.5	560.8	561.	560.7	560.7
23	561.	561.9	562.9	562.9	562.8	562.4	561.	562.3	563.5	562.4	562.4
24	560.2	559.8	560.	560.8	560.3	560.8	560.3	560.4	560.	559.7	559.7
26	568.9	569.2	569.7	569.6	569.8	559.7	569.	560.1	559.4	560.5	560.5
27	561.7	561.2	.....	562.1	562.2	561.1	561.1	.....	.....	560.9	560.9
28	560.6	560.5	560.5	560.5	560.6	560.3	560.6	560.2	560.	560.	560.
29	558.6	559.1	559.1	558.4	559.3	558.5	558.7	559.	559.	559.6	559.6
30	557.1	556.8	554.7	556.2	556.1	560.8	562.7	562.4	562.6	562.2	562.2
31	562.4	561.1	561.1	561.	561.5	561.4	561.5	561.4	561.7	561.	561.
Means.....	560.8	561.	560.9	560.9	560.7	561.	561.	561.3	561.2	561.1	561.1

† One minute late.

* Three minutes late.

December.]

SECOND MAXIMUM OF DECLINATION.

[1942.]

	<i>h. m.</i> 18 00 12 19½	<i>h. m.</i> 18 06 12 25½	<i>h. m.</i> 18 12 12 31½	<i>h. m.</i> 18 18 12 37½	<i>h. m.</i> 18 24 12 43½	<i>h. m.</i> 18 30 12 49½	<i>h. m.</i> 18 36 12 55½	<i>h. m.</i> 18 42 13 01½	<i>h. m.</i> 18 48 13 07½	<i>h. m.</i> 18 54 13 13½
Göttingen time.....										
Observatory time.....										
Dec. 1.....	558.4	558.6	558.8	559.7	559.	559.7	559.9	559.7	560.	559.7
2.....	559.7	559.4	559.4	559.1	559.1	559.	559.4	559.	559.5	559.5
3.....	557.2	557.4	556.8	556.8	556.5	556.7	556.7	556.9	557.	556.3
4.....	552.8	553.1	552.8	553.1	553.	553.	553.	553.	553.1	553.
5.....	558.5	558.1	557.7	557.3	556.8	557.	556.7	556.9	557.	557.1
6.....	553.	553.2	552.8	554.	554.	554.	554.	554.4	554.4	551.5
7.....	558.7	557.2	556.5	556.3	556.6	557.1	557.	556.2	555.6	555.5
8.....	552.3	553.2	554.7	555.4	555.7	556.3	555.6	553.9	552.1	551.4
9.....	556.1	557.	557.5	556.	555.6	556.5	555.5	556.	556.9	556.6
10.....	557.9	557.7	557.1	557.3	557.	557.4	557.3	556.9	556.8	557.
11.....	560.6	560.3	560.	559.4	559.1	559.2	558.5	557.8	556.6	558.8
12.....	560.	559.2	557.5	559.1	559.7	559.5	559.5	559.1	559.7	559.7
13.....	557.1	557.2	556.3	555.7	557.2	556.5	556.5	556.	556.3	556.
14.....	560.	560.6	559.8	559.6	559.9	559.	560.	560.	559.8	559.7
15.....	558.5	558.4	558.5	559.5	559.7	560.1	560.1	560.1	560.7	561.1
16.....	558.	557.2	556.3	555.	554.9	554.3	552.8	553.5	553.8	554.3
17.....	555.	555.5	554.7	555.5	556.	555.5	555.6	555.6	555.7	556.5
18.....	552.5	553.1	552.7	552.	552.5	553.4	552.8	552.5	551.9	551.8
19.....	555.5	555.2	555.7	555.2	554.5	554.9	555.2	555.9	555.6	555.5
20.....	559.	558.5	558.1	557.4	557.8	557.	557.4	558.	557.5	556.6
21.....	555.5	555.2	555.3	555.1	555.5	556.5	554.7	554.1	554.	554.1
22.....	557.8	557.7	556.9	556.8	555.5	555.9	554.7	554.3	554.	553.5
23.....	554.9	554.4	554.2	553.7	552.9	553.4	552.8	552.	551.2	551.5
24.....	552.8	553.6	553.	552.1	551.9	551.8	551.5	552.3	552.4	552.5
25.....	551.2	550.3	550.	549.9	550.2	549.3	550.	549.3	549.6	550.
26.....	564.9	563.8	563.	561.3	560.	558.6	557.5	560.5	559.8	559.5
27.....	558.3	558.7	557.8	557.8	557.6	556.9	556.8	556.9	556.3	556.4
28.....	556.9	556.8	556.4	556.3	556.2	556.2	556.	555.9	555.7	555.5
29.....										
30.....										
31.....										
Means.....	556.9	556.8	556.4	556.3	556.2	556.2	556.	555.9	555.7	555.5

DECEMBER.]

FIRST MINIMUM OF DECLINATION.

[1842.

	<i>h. m.</i> 2 00 20 19½	<i>h. m.</i> 2 06 20 25½	<i>h. m.</i> 2 12 20 31½	<i>h. m.</i> 2 18 20 37½	<i>h. m.</i> 2 24 20 43½	<i>h. m.</i> 2 30 20 49½	<i>h. m.</i> 2 36 20 55½	<i>h. m.</i> 2 42 21 01½	<i>h. m.</i> 2 48 21 07½	<i>h. m.</i> 2 54 21 13½
Göttingen time.....										
Observatory time.....										
Dec. 1.....	564.2	563.7	566.5	563.8	564.	564.7	561.5	565.1	564.4	565.2
2.....	563.6	563.4	563.	562.5	563.3	564.5	563.	562.6	562.9	563.
3.....	563.7	563.	563.2	563.	563.5	562.9	.....	562.9	562.9	.....
5.....	564.7	564.8	565.	565.	565.1	565.5	566.	565.2	565.5	565.8
6.....	565.	565.	565.	564.3	564.5	563.6	563.7	563.5	563.	563.1
7.....	566.3	566.7	565.7	563.8	564.	564.7	564.7	566.	565.5	566.6
8.....	564.3	564.	564.	565.	565.4	566.7	567.	570.3	571.5	569.
9.....	559.5	559.2	562.2	566.	565.4	566.4	567.5	566.9	570.2	569.
10.....	565.	564.7	565.2	566.	565.5	566.2	566.	564.5	564.3	564.5
12.....	563.8	563.7	563.9	563.4	563.7	563.1	563.5	563.9	564.	563.8
13.....	564.5	566.	565.	565.	564.1	564.1	563.3	563.7	562.4	562.9
14.....	564.	564.	563.8	563.5	563.9	564.	563.9	564.5	563.	563.5
15.....	565.	564.4	565.5	565.7	565.	565.4	566.5	564.	564.4	.....
16.....	563.5	562.7	563.8	562.1	562.7	563.1	563.2	562.3	563.7	564.1
17.....	563.2	563.8	564.1	565.	564.7	565.3	.....	565.	563.9	565.5
19.....	562.9	562.2	563.	563.2	563.2	563.1	563.4	563.	562.5	562.6
20.....	563.2	563.	562.9	562.6	562.	561.8	561.9	562.	561.5	561.
21.....	562.6	562.5	562.4	562.4	563.	562.7	563.7	564.7	567.	566.
22.....	565.2	564.3	563.5	562.7	563.6	562.7	562.8	562.	562.4	563.
23.....	560.7	561.7	561.4	562.	561.4	561.8	561.4	562.5	561.1	561.1
24.....	561.1	561.6	560.5	561.6	563.2	563.9	562.1	562.1	562.7	563.1
26.....	561.4	561.6	562.	561.7	562.3	563.	563.1	563.6	563.2	563.7
27.....	562.5	562.5	562.6	562.9	562.1	562.4	561.7	561.7	564.	563.7
28.....	566.	562.6	562.1	560.7	560.3	562.1	559.	559.5	560.4	560.4
29.....	563.9	563.	562.6	563.4	564.	563.2	563.5	564.	564.2	563.8
30.....	561.4	561.2	562.9	562.9	561.2	561.2	562.	561.9	564.6	564.9
31.....	563.5	563.	562.5	563.	563.	562.5	562.2	562.	563.2	563.5
Means.....	563.5	563.6	563.4	563.4	563.5	563.6	563.4	563.7	564.	564.1

December.]

FIRST MINIMUM OF DECLINATION—Continued.

[1942.]

[97]

798

Göttingen time.....	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
Observatory time.....	3 00	3 06	3 12	3 18	3 24	3 30	3 36	3 42	3 48	3 54	3 54
Dec. 1.....	564.7	564.6	563.7	563.5	562.9	563.	563.5	562.1	562.5	561.5	561.5
2.....	565.	563.3	563.2	563.6	564.	564.	564.	564.	564.5	564.	564.
3.....	563.	563.2	563.6	563.6	563.3	563.5	563.5	563.4	563.3	563.7	563.7
4.....	565.5	566.1	566.1	565.5	565.4	565.	564.7	565.1	565.5	564.6	564.6
5.....	563.4	562.5	562.1	564.9	566.1	567.2	568.4	566.6	565.2	563.1	563.1
6.....	567.5	567.4	567.	570.	572.3	571.	569.8	568.2	573.6	573.5	573.5
7.....	566.	566.	565.9	565.3	564.8	565.	566.4	565.4	565.2	565.	565.
8.....	*568.5	568.7	566.2	565.6	568.	568.1	570.1	568.2	571.	570.	570.
9.....	564.8	565.	565.2	565.4	565.4	565.1	565.1	565.5	570.5	573.	573.
10.....	563.8	563.2	563.5	563.1	563.5	564.	563.5	564.	563.8	563.5	563.5
11.....	564.2	565.5	564.5	564.2	562.	562.	564.2	567.2	569.1	*569.1	*569.1
12.....	563.4	563.8	563.9	*563.5	563.2	563.8	563.8	561.8	562.2	561.9	561.9
13.....	565.	565.2	565.	565.8	565.	565.5	565.	564.3	564.2	565.2	565.2
14.....	562.5	564.	564.1	563.8	564.2	564.4	565.	564.7	564.4	564.8	564.8
15.....	565.7	562.4	562.4	562.6	562.6	561.9	562.	561.9	561.6	560.5	560.5
16.....	561.6	561.6	565.1	561.	561.	561.	561.7	561.7	561.	561.	561.
17.....	564.6	564.9	561.	564.2	564.7	562.5	561.7	561.7	561.	562.	562.
18.....	563.5	562.5	564.2	562.9	563.6	562.9	564.8	564.4	564.8	563.4	563.4
19.....	561.2	561.8	561.9	561.6	561.6	560.8	560.3	561.7	561.8	561.5	561.5
20.....	563.7	562.5	562.9	562.1	562.3	562.5	563.2	563.2	564.2	563.	563.
21.....	563.5	563.6	563.1	563.5	563.5	563.9	563.9	563.8	563.3	563.2	563.2
22.....	564.5	563.8	*565.	564.	564.	564.	564.7	563.	561.8	560.8	560.8
23.....	560.7	560.4	561.	560.9	560.4	560.7	560.7	560.7	560.7	560.6	560.6
24.....	563.9	563.9	563.9	563.4	563.6	563.8	563.7	563.6	562.7	562.4	562.4
25.....	563.	562.8	563.1	562.8	562.8	563.	563.1	562.9	562.8	562.5	562.5
26.....	563.5	563.1	563.8	563.9	563.5	563.2	563.5	563.	562.8	562.8	562.8
27.....	564.1	563.9	564.	564.	564.	564.	564.	564.	564.	564.	564.
28.....	564.5	563.8	*565.	565.	564.	564.	564.	564.	564.	564.	564.
29.....	560.7	560.4	561.	560.9	560.4	560.7	560.7	560.7	560.7	560.6	560.6
30.....	563.9	563.9	563.9	563.4	563.6	563.8	563.7	563.6	562.7	562.4	562.4
31.....	563.	562.8	563.1	562.8	562.8	563.	563.1	562.9	562.8	562.5	562.5
Means.....	564.1	563.9	564.	563.9	564.2	564.	564.3	563.8	564.5	564.4	564.4

* One minute late.

† Two minutes soon.

[1842.]

SECOND MINIMUM OF DECLINATION.

December.]

	<i>h. m.</i> 13 00 7 19½	<i>h. m.</i> 13 06 7 25½	<i>h. m.</i> 13 12 7 31½	<i>h. m.</i> 13 18 7 37½	<i>h. m.</i> 13 24 7 43½	<i>h. m.</i> 13 30 7 49½	<i>h. m.</i> 13 36 7 55½	<i>h. m.</i> 13 42 8 01½	<i>h. m.</i> 13 48 8 07½	<i>h. m.</i> 13 54 8 13½
Göttingen time.....										
Observatory time.....										
Dec. 1.....	562.4	562.8	563.7	562.8	562.3	562.7	568.	564.1	566.8	566.8
2.....	564.2	564.4	565.3	565.1	564.8	566.5	564.7	564.5	565.2	564.
3.....	562.8	562.6	562.8	563.4	563.7	564.5	563.6	564.2	563.7	564.1
5.....	563.8	563.3	564.0	564.8	564.1	564.1	563.8	564.1	563.8	564.6
6.....	560.	562.	562.1	563.2	563.6	563.9	563.4	562.9	563.7	562.8
7.....	*565.9	564.5	564.1	566.7	564.7	567.2	564.7	564.9	565.7	565.9
8.....	565.5	565.2	565.	564.8	565.1	565.5	565.4	565.	565.	564.
9.....	561.8	561.2	562.8	563.5	562.5	563.3	563.3	564.2	564.	564.
10.....	564.1	564.1	564.3	565.1	565.5	565.5	565.7	565.5	565.	565.
12.....	564.5	564.1	564.3	562.9	564.2	565.	563.6	565.5	565.7	566.
13.....	.....	565.1	565.7	564.5	566.2	566.3	566.5	567.3	566.6	566.9
14.....	563.4	563.6	564.5	563.8	563.6	563.5	563.3	563.3	564.1	563.3
15.....	563.1	563.9	563.1	564.4	564.6	564.5	564.	563.9	564.1	563.7
16.....	565.4	566.2	566.1	567.4	567.9	567.4	566.9	565.8	567.7	564.7*
17.....	565.7	565.5	565.7	565.6	564.9	564.8	566.3	565.9	565.	564.3
19.....	564.7	565.	565.9	566.7	566.7	566.2	566.7	566.6	566.8	566.4
20.....	564.2	563.8	564.9	564.	563.4	563.1	562.9	563.5	563.6	564.4
21.....	562.2	562.6	563.1	563.5	564.	563.7	563.4	563.9	565.3	566.5
22.....	563.4	564.2	564.7	564.8	564.9	564.9	565.3	565.6	566.	566.6
23.....	563.2	564.9	564.9	565.1	564.7	565.3	565.9	566.	566.1	566.3
24.....	562.7	564.7	564.5	565.2	565.4	566.1	566.6	566.9	567.	567.2
26.....	.....	562.8	562.9	564.	564.	563.4	563.9	564.9	564.2	565.
27.....	563.8	565.7	564.8	566.	565.4	566.2	566.6	566.8	567.4	569.
28.....	.....	563.8	564.5	564.1	565.	565.2	565.8	564.8	565.1	566.7
29.....	562.9	564.7	563.9	563.1	564.7	564.9	565.6	565.1	564.7	564.3
30.....	562.2	561.1	557.	557.	562.5	562.5	562.	560.6	560.6	563.9
31.....	564.	564.8	565.3	565.6	565.3	565.6	566.	565.8	569.1	567.4
Means.....	563.6	563.9	564.1	564.3	564.3	564.5	564.6	564.5	564.9	565.

* Two minutes late.

Decem.]

MAXIMUM OF VERTICAL FORCE.

[1849.]

[97]

800

Göttingen time Observatory time	h. m.		Therm., Fah.		h. m.		h. m.		h. m.		Therm., Fah.		h. m.		h. m.		h. m.	
	22 04	16 23½	22 10	16 28½	h. m.	22 16	16 35½	h. m.	22 23	16 41½	h. m.	22 28	16 47½	h. m.	22 34	16 53½	h. m.	22 40
Dec. 1	646.	645.5	645.5	645.5	645.5	645.5	645.5	644.5	644.5	644.5	59.8	642.7	642.7	642.	643.	642.7	642.	641.7
2	694.2	694.5	694.5	694.5	694.5	694.5	694.5	695.2	695.2	695.2	64.6	695.2	695.2	695.9	696.	695.2	695.9	696.9
3	763.8	763.3	763.3	763.3	763.3	763.3	763.3	764.1	764.1	764.1	69.2	763.	763.	762.3	761.6	761.6	761.6	750.8
5	730.	730.	730.	730.	730.	730.	730.	730.4	730.4	730.4	67.4	730.	730.	730.	730.	730.	730.	730.
6	730.1	730.9	730.9	731.	731.	731.	731.	731.	731.	731.	67.	731.	731.	730.5	730.2	730.1	730.1	730.1
7	684.	682.1	682.1	681.7	681.7	681.7	681.7	680.	680.	680.	63.	678.	677.5	677.5	676.2	676.4	676.4	676.4
8	652.	650.5	650.5	650.	650.	650.	650.	649.	649.	649.	60.1	648.	646.	646.	646.	646.	646.	646.
9	697.5	697.	697.	697.	697.	697.	697.	698.	698.	698.	65.9	698.4	698.4	698.5	698.9	698.5	698.5	698.5
10	687.2	687.4	687.4	687.4	687.4	687.4	687.4	688.	688.	688.	63.	688.	688.	688.8	689.	688.8	689.	689.7
12	691.1	691.2	691.2	691.7	691.7	691.7	691.7	692.2	692.2	692.2	64.6	693.	693.	693.4	693.9	693.4	693.9	693.8
13	581.5	581.5	581.5	580.2	580.2	580.2	580.2	582.	582.	582.	55.5	583.	582.8	582.8	582.5	582.5	582.5	584.
14	643.1	642.3	642.3	641.6	641.6	641.6	641.6	640.3	640.3	640.3	59.5	640.	640.	639.	639.1	639.1	639.1	639.
15	742.6	748.7	748.7	754.	754.	754.	754.	763.	763.	763.	71.	768.	771.	771.	772.9	772.9	772.9	773.7
16	688.	689.	689.	690.	690.	690.	690.	691.	691.	691.	65.2	693.8	693.8	695.1	696.	695.1	696.	697.
17	545.5	545.	545.	545.	545.	545.	545.	548.	548.	548.	55.	553.6	553.6	556.4	560.2	560.2	565.1	565.1
19	621.	623.2	623.2	625.	625.	625.	625.	628.1	628.1	628.1	60.2	631.4	631.4	633.	634.	634.	636.1	636.1
20	698.5	699.	699.	699.6	699.6	699.6	699.6	699.	699.	699.	64.3	699.	699.	698.9	698.9	698.9	698.1	698.1
21	675.	674.	674.	673.7	673.7	673.7	673.7	672.	672.	672.	62.	670.5	670.5	670.	669.9	669.9	669.	669.
22	689.4	670.	670.	669.7	669.7	669.7	669.7	671.	671.	671.	61.3	671.	671.	671.	671.	671.	671.	671.
23	566.7	566.	566.	566.5	566.5	566.5	566.5	567.	567.	567.	54.2	568.9	568.9	569.	569.	569.	569.2	569.2
24	698.3	698.8	698.8	699.5	699.5	699.5	699.5	700.	700.	700.	64.8	701.8	701.8	702.5	703.4	703.4	704.1	704.1
26	701.8	702.5	702.5	703.5	703.5	703.5	703.5	704.6	704.6	704.6	65.5	707.	707.	707.4	707.7	707.7	708.3	708.3
27	714.	713.5	713.5	714.5	714.5	714.5	714.5	715.	715.	715.	64.9	714.	713.2	713.2	713.	713.	712.2	712.2
28	698.	694.	694.	694.9	694.9	694.9	694.9	695.	695.	695.	64.8	697.8	697.8	698.	698.3	698.3	700.2	700.2
29	679.5	679.	679.	678.4	678.4	678.4	678.4	676.7	676.7	676.7	61.5	674.5	673.2	673.2	672.	672.	670.	670.
30	635.2	635.	635.	636.1	636.1	636.1	636.1	635.5	635.5	635.5	59.2	634.2	634.	634.	633.	633.	631.9	631.9
31	610.1	612.	612.	614.7	614.7	614.7	614.7	617.7	617.7	617.7	59.5	621.4	622.	622.	622.8	622.8	623.	623.
Means	670.7	671.	671.	671.5	671.5	671.5	671.5	672.1	672.1	672.1	62.7	672.8	673.	673.	673.3	673.3	673.3	673.3
Reduced to 32° Fah.	256.5	256.8	256.8	257.2	257.2	257.2	257.2	257.7	257.7	257.7		258.3	258.5	258.5	258.7	258.7	258.7	258.7

December.]

MAXIMUM OF VERTICAL FORCE—Continued.

[1842.]

Göttingen time. Observatory time.	h. m. 23 04 17 23½	Therm., Feb.	h. m. 23 10 17 29½	h. m. 23 16 17 35½	h. m. 23 22 17 41½	h. m. 23 28 17 47½	h. m. 23 34 17 53½	Therm., Feb.	h. m. 23 40 17 59½	h. m. 23 46 18 05½	h. m. 23 52 18 11½	h. m. 23 59 18 17½	Therm., Feb.
Dec. 1	641.3	60.2	641.	641.5	641.4	642.	642.5	60.6	643.7	645.	646.	647.	61.
2	697.	65.	697.4	697.2	697.	697.2	697.	65.	696.5	696.	696.	696.	64.5
3	750.	68.2	748.8	748.3	747.7	746.6	745.6	67.9	744.8	743.9	743.5	741.8	67.6
4	729.9	67.1	730.	729.5	729.7	730.	729.1	67.	728.8	728.5	728.	728.	67.
5	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
6	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
7	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
8	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
9	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
10	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
11	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
12	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
13	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
14	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
15	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
16	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
17	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
18	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
19	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
20	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
21	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
22	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
23	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
24	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
25	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
26	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
27	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
28	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
29	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
30	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
31	730.	66.8	730.	729.6	729.	728.	728.8	66.7	728.	728.	728.	728.	66.7
Means	673.4	62.7	673.8	674.	674.2	674.5	674.7	62.8	674.9	675.1	675.3	675.5	62.9
Reduced to 32° Fah.	258.7		259.9	258.9	258.8	258.9	258.8		258.8	258.6	258.5	258.4	

* One minute late.

December.]

MINIMUM OF VERTICAL FORCE.

[1842.]

[97]

802

Göttingen time..... Observatory time.....	<i>h. m.</i> 12 34 6 53½	Therm., Fah.	<i>h. m.</i> 12 40 6 59½	<i>h. m.</i> 12 46 7 05½	<i>h. m.</i> 12 52 7 11½	<i>h. m.</i> 12 58 7 17½	<i>h. m.</i> 13 04 7 23½	Therm., Fah.	<i>h. m.</i> 13 10 7 29½	<i>h. m.</i> 13 16 7 35½	<i>h. m.</i> 13 22 7 41½	<i>h. m.</i> 13 28 7 47½
Dec. 1.....	726.	67.6	726.8	727.4	727.6	729.1	730.	68.6	731.7	733.1	734.7	735.8
2.....	702.4	65.4	704.1	703.6	703.3	704.4	704.	64.6	703.4	703.7	700.6	700.3
3.....	687.1	64.7	687.5	687.2	680.	690.	690.2	64.3	690.1	692.1	691.8	691.7
4.....	726.8	68.3	722.7	727.1	726.3	726.5	727.	68.3	728.5	728.7	727.2	727.1
5.....	766.4	69.	757.7	757.	756.2	757.5	757.6	69.	758.1	758.5	758.2	758.8
6.....	731.3	67.7	731.2	730.9	731.	731.2	730.4	67.	724.6	727.1	729.1	729.1
7.....	705.7	64.7	702.4	702.2	701.3	701.2	700.3	64.3	700.5	699.2	698.2	701.1
8.....	725.8	66.9	726.5	725.6	724.7	725.	725.3	66.9	725.5	725.3	725.2	725.7
9.....	703.2	66.5	710.7	709.5	709.2	714.5	711.8	66.7	711.7	710.4	710.3	711.1
10.....	659.	62.	659.2	659.8	660.	660.	660.2	62.2	661.	661.2	661.9	662.1
11.....	.....	.....	.....	.....	.....	.....	592.1	55.5	591.5	590.4	589.7	589.2
12.....	685.	56.	685.4	685.9	586.	586.4	586.8	56.1	582.1	589.	589.	589.8
13.....	663.5	61.7	664.1	663.6	663.2	663.5	663.4	61.8	662.9	663.	663.	663.
14.....	754.2	68.	753.4	754.7	754.	753.9	752.7	66.5	750.7	747.6	744.7	742.8
15.....	671.3	62.2	671.2	670.9	670.9	670.	668.9	61.6	668.6	666.9	666.	664.8
16.....	667.7	61.6	668.5	668.6	667.2	666.7	665.	60.	665.1	664.6	662.6	661.8
17.....	615.	58.	615.	615.	614.6	614.8	615.	58.4	616.	615.	615.4	616.5
18.....	725.	67.	723.2	722.5	725.4	726.	726.1	67.	726.	724.3	725.4	725.1
19.....	675.8	62.2	674.8	676.6	675.5	675.2	674.9	62.1	674.7	674.	674.	673.9
20.....	684.6	54.5	683.7	682.6	681.6	681.	680.2	53.7	678.6	676.3	674.	673.9
21.....	626.3	56.8	624.6	622.2	619.6	617.4	618.5	55.8	609.	607.7	603.8	600.1
22.....	664.	63.2	665.	666.2	666.7	667.6	668.6	63.8	639.2	630.7	631.8	632.7
23.....	735.8	66.3	731.5	733.5	733.	732.9	732.9	66.2	733.2	732.7	731.9	731.8
24.....	702.7	61.2	703.5	702.	701.5	700.9	700.1	63.4	699.	697.3	695.7	694.8
25.....	647.9	58.7	647.3	647.	645.2	643.9	639.4	58.5	636.7	636.	632.6	630.9
26.....	643.5	57.6	634.3	634.1	631.4	628.5	625.9	57.4	623.6	619.1	618.4	617.9
27.....	682.4	62.	682.8	682.3	682.1	681.6	680.4	62.2	678.9	677.9	676.9	674.4
28.....	684.4	62.5	684.3	684.1	683.8	683.8	679.9	62.6	679.1	678.4	678.1	677.9
29.....	272.7	.....	271.5	270.2	269.3	267.7	266.1	.....	266.9	267.7	268.9	270.2

* Supplied.

† One minute late.

December.]

MINIMUM OF VERTICAL FORCE—Continued.

[1849.]

Göttingen time.....	h. m. 13 34 7 53½	Therm., Fah.	h. m. 13 40 7 59½	h. m. 13 46 8 05½	h. m. 13 52 8 11½	h. m. 13 58 8 17½	h. m. 14 04 8 23½	Therm., Fah.	h. m. 14 10 8 29½	h. m. 14 16 8 35½	h. m. 14 22 8 41½	h. m. 14 28 8 47½	Therm., Fah.
Dec. 1.....	737.6	68.3	738.7	739.7	739.7	739.3	739.5	67.9	738.6	737.9	737.4	736.6	66.6
2.....	699.9	64.3	698.5	697.2	696.7	695.1	694.	63.9	692.5	691.3	691.7	691.6	65.2
3.....	691.	64.	690.6	689.7	688.7	688.7	688.5	63.7	688.	687.8	688.5	688.	63.5
4.....	727.1	68.3	727.5	727.7	727.7	727.7	727.	68.2	727.6	727.8	728.2	729.3	68.5
5.....	766.9	69.	765.6	764.5	763.8	762.7	761.7	69.	751.5	751.7	751.4	751.3	69.4
6.....	728.5	66.6	727.5	727.	726.3	725.7	725.7	66.5	724.3	724.	723.	722.7	66.3
7.....	700.3	63.8	698.7	697.7	697.	696.1	695.4	63.4	694.7	694.6	694.5	694.5	64.1
8.....	725.4	67.1	726.	726.4	726.6	726.6	727.7	67.4	727.6	730.7	731.9	731.5	67.
9.....	712.6	66.7	713.5	714.5	715.4	716.7	716.7	66.6	717.7	719.4	720.4	721.	66.6
10.....	662.9	62.4	663.1	663.5	664.	664.5	665.1	62.6	666.	666.8	668.	668.4	62.8
11.....	587.1	56.5	586.6	586.6	584.4	583.1	582.3	55.	584.	580.	579.5	578.	54.5
12.....	589.9	56.3	590.	590.5	590.9	591.3	591.7	56.5	592.5	593.3	594.3	595.1	57.1
13.....	662.8	62.1	662.4	662.9	663.1	663.1	663.3	62.5	663.5	664.	664.9	665.6	63.1
14.....	789.8	64.5	796.6	794.1	791.2	791.1	793.8	64.	791.	718.2	715.	712.4	63.8
15.....	663.2	61.1	661.3	660.9	659.5	658.5	657.2	60.7	656.7	655.3	654.	652.3	60.4
16.....	660.6	59.8	659.9	657.	656.8	655.5	654.5	59.5	653.	651.9	651.	649.5	59.1
17.....	616.4	59.	617.4	617.4	618.8	619.7	621.	59.5	622.	623.4	625.	626.5	60.7
18.....	783.7	66.2	783.1	782.	782.	780.3	729.3	65.4	729.	728.	726.8	726.	64.4
19.....	673.9	61.3	672.9	671.7	671.1	670.	669.	60.8	667.1	666.	665.	664.	60.2
20.....	576.7	53.4	574.	569.2	568.4	568.5	567.2	53.	566.6	565.3	565.	564.1	54.1
21.....	595.9	54.8	592.5	588.4	586.	583.	580.5	53.8	578.5	577.6	576.	575.4	54.
22.....	693.3	63.8	693.6	694.	695.5	695.	695.	63.9	695.2	696.	696.4	697.	64.1
23.....	730.9	65.5	730.9	730.7	729.3	729.3	729.3	65.4	727.9	727.	727.1	726.8	65.
24.....	694.2	63.	693.5	692.3	692.3	691.3	691.4	63.2	690.	689.2	689.	689.	63.3
25.....	629.7	57.8	629.2	628.1	626.9	625.	623.7	57.6	622.5	621.3	620.2	619.5	57.3
26.....	616.2	56.8	615.7	614.4	613.1	611.7	611.5	57.4	611.3	612.3	613.	613.5	58.3
27.....	670.	61.2	669.9	669.6	668.5	667.	665.1	60.2	662.7	661.1	661.5	*660.	58.8
Means.....	676.9	62.1	676.3	675.5	675.	674.1	673.6	62.1	673.	672.7	672.5	672.2	62.2
Reduced to 32° Fah.....	270.7		270.	269.1	268.5	267.5	266.9		266.2	265.8	265.5	265.1	

* Supplied.

[1842.]

SECOND MAXIMUM OF HORIZONTAL FORCE.

DECEMBER.]

	<i>h. m.</i> 21 02 15 21½	Therm., Feb.	<i>h. m.</i> 21 08 15 27½	<i>h. m.</i> 21 14 15 32½	<i>h. m.</i> 21 20 15 39½	<i>h. m.</i> 21 26 15 45½	<i>h. m.</i> 21 32 15 51½	Therm., Feb.	<i>h. m.</i> 21 38 15 57½	<i>h. m.</i> 21 44 16 03½	<i>h. m.</i> 21 50 16 09½	<i>h. m.</i> 21 56 16 15½
Dec. 1.....	763.8	54.	763.8	764.2	764.4	765.	765.3	53.9	765.	764.8	765.3	764.5
2.....	764.6	59.8	766.5	764.2	764.	763.	761.	59.	760.7	761.	760.5	763.2
3.....	779.7	64.8	779.4	779.8	778.7	777.1	776.7	65.1	778.9	778.	777.2	778.4
5.....	766.5	63.9	765.	765.2	765.1	766.2	763.5	61.	766.5	767.7	768.	766.5
6.....	790.5	61.9	790.	788.7	786.7	790.	790.	62.	790.	787.5	784.3	785.5
7.....	799.2	60.	800.5	801.5	800.	801.	802.2	60.	803.7	803.6	805.	806.
8.....	793.2	57.	782.2	791.5	788.4	801.	786.5	57.	782.5	780.2	782.5	781.
9.....	838.5	61.6	840.5	829.	839.7	841.	839.	-61.7	852.	849.	843.7	834.7
10.....	793.	58.8	791.5	793.5	794.5	787.7	785.2	58.7	785.5	785.7	782.4	779.2
12.....	778.9	59.4	774.5	772.5	773.	772.5	775.2	59.3	773.6	773.1	773.1	773.8
13.....	760.	52.	768.	768.1	770.8	770.2	771.4	52.	773.6	776.	778.5	775.2
14.....	774.8	55.6	775.	778.2	773.5	772.5	769.	55.3	769.5	769.1	772.7	772.2
15.....	784.	60.	782.2	784.	783.	782.7	782.	60.	783.	778.	778.2	778.7
16.....	792.7	58.8	791.	790.2	789.2	788.7	789.	59.	789.	785.2	785.5	787.
17.....	764.6	49.	761.8	760.9	763.3	760.2	757.5	49.4	757.6	758.6	755.5	755.1
19.....	764.7	54.8	768.2	765.7	765.2	766.	762.7	55.	769.7	765.	763.	764.1
20.....	778.5	60.4	776.2	778.7	776.5	777.5	777.5	60.4	776.5	777.7	776.	773.
21.....	772.5	58.1	770.7	772.	774.5	770.5	772.5	58.1	774.5	776.2	775.6	775.5
22.....	780.2	57.	787.1	785.1	782.2	782.7	780.5	57.3	783.	749.6	747.2	750.4
23.....	757.4	47.2	756.	761.	752.8	752.7	750.5	47.1	750.5	750.5	745.3	743.4
24.....	758.6	56.8	758.5	757.	756.9	759.2	756.	56.8	756.3	756.6	756.3	755.4
26.....	764.5	58.8	763.7	764.8	761.8	763.8	765.	59.6	764.1	762.4	764.4	762.8
27.....	767.	59.	*765.2	769.7	766.2	763.	767.	59.	762.	766.	765.7	767.2
28.....	772.	56.7	769.2	764.	766.4	762.2	767.3	56.8	767.2	767.7	773.1	770.6
29.....	781.5	58.	780.	779.	776.5	777.5	781.5	57.6	781.2	782.6	781.4	775.8
30.....	773.	56.	773.2	773.5	772.8	774.	769.7	56.	771.	769.2	768.7	770.2
31.....	760.	51.	759.5	758.5	758.2	755.5	755.7	51.5	758.	768.	756.	760.2
Means.....	776.	57.5	775.6	774.8	774.6	774.	773.6	57.5	774.6	774.	773.6	773.
Reduced to 32° Fah....	712.4		712.	711.1	710.8	710.2	709.7		710.7	710.	709.6	708.9

* One minute late.

December.]

SECOND MAXIMUM OF HORIZONTAL FORCE—Continued.

[1943.]

[97]

806

Göttingen time Observatory time.....	A. m. 22 02 16 21½	Therm., Fah.	A. m. 22 08 16 27½	A. m. 22 14 16 33½	A. m. 22 20 16 39½	A. m. 2 26 16 45½	A. m. 22 32 16 51½	Therm., Fah.	A. m. 22 38 16 57½	A. m. 22 44 17 03½	A. m. 22 50 17 09½	A. m. 22 56 17 15½	Therm., Fah.
Dec. 1.....	764.2	53.8	765.	768.5	764.8	764.5	763.5	53.5	762.2	762.5	763.6	760.5	53.
2.....	763.2	59.	764.2	766.9	763.	761.5	760.9	53.9	762.6	761.2	761.6	761.5	58.9
3.....	779.6	65.2	779.6	780.1	779.7	779.2	779.4	64.7	778.6	777.1	778.1	778.3	64.3
4.....	765.8	64.	764.	767.7	765.5	770.	767.7	64.	768.7	770.3	771.5	771.	64.
5.....	766.7	61.8	765.	762.5	762.5	780.7	783.5	61.7	783.8	781.	780.2	779.2	61.6
6.....	808.5	59.5	802.2	806.	802.5	800.2	800.2	59.2	800.5	800.	801.7	802.7	59.
7.....	781.	56.	780.7	782.7	781.7	780.2	780.2	56.	778.3	778.	776.5	776.7	55.5
8.....	824.5	60.7	824.7	831.	822.2	825.3	830.2	60.	825.	824.	823.4	828.	60.
9.....	782.5	59.	782.2	781.2	779.	781.2	777.7	59.	780.7	782.2	783.	781.7	59.
10.....	772.1	59.7	770.7	772.6	773.	770.5	773.2	59.8	773.2	774.7	776.	774.5	60.
11.....	777.8	52.	776.6	779.5	778.2	782.	784.7	52.	775.	776.	778.	779.7	52.
12.....	770.4	55.3	771.	769.7	768.8	768.	768.3	55.	769.4	769.	764.2	769.5	54.8
13.....	777.1	62.	776.4	776.	776.2	777.2	778.7	62.	783.7	780.6	779.	779.5	64.
14.....	783.9	59.6	783.5	783.2	782.	783.	781.2	60.	782.5	781.9	782.5	782.	60.4
15.....	761.8	49.7	761.7	763.9	752.8	752.1	751.7	50.5	752.8	752.2	753.4	748.	51.4
16.....	764.9	55.2	763.	771.	773.7	774.2	780.	56.	773.2	776.5	774.5	778.2	56.4
17.....	775.7	60.4	776.	776.7	776.2	777.	775.7	60.3	775.4	775.5	775.2	773.2	60.3
18.....	774.2	58.2	772.	772.2	774.2	772.7	772.7	58.4	772.5	773.7	775.4	773.	58.3
19.....	749.7	57.1	748.7	746.4	759.2	756.2	749.7	57.	750.7	751.	750.7	753.5	57.
20.....	742.5	47.2	737.	745.3	746.4	744.3	744.7	47.3	748.2	747.2	744.2	743.5	47.4
21.....	765.	56.9	757.8	766.5	753.2	752.2	755.7	57.1	756.1	756.2	756.9	756.2	57.5
22.....	762.9	60.	761.4	764.	764.5	762.9	763.1	60.	763.1	765.2	763.8	765.9	60.
23.....	766.5	59.	767.	769.7	768.6	767.7	770.7	58.8	771.7	767.5	769.7	768.7	58.6
24.....	767.	59.	767.5	765.7	768.	767.	766.5	59.2	761.	767.7	764.5	762.6	59.4
25.....	776.6	57.8	784.	782.2	781.8	781.5	782.7	57.	780.	782.7	780.2	780.2	56.7
26.....	768.8	55.8	769.5	767.2	765.5	768.7	769.2	55.7	768.2	769.2	767.	770.2	55.6
27.....	755.2	52.2	757.	768.5	756.7	756.	757.	52.8	756.2	759.	766.	759.	53.2
28.....	772.1	57.6	771.8	773.	772.6	772.5	772.5	57.7	773.2	772.5	772.5	772.4	57.7
29.....	768.		767.7		768.4	768.3	768.3		768.	768.2	768.2	768.1	
30.....	768.8		769.5	767.2	765.5	768.7	769.2		768.2	769.2	767.	770.2	
31.....	755.2		757.	768.5	756.7	756.	757.		756.2	759.	766.	759.	
Means.....	772.1	57.6	771.8	773.	772.6	772.5	772.5	57.7	773.2	772.5	772.5	772.4	57.7
Reduced to 32° Fah.....	768.		767.7	768.9	768.4	768.3	768.3		768.	768.2	768.2	768.1	

December.]

FIRST MINIMUM OF HORIZONTAL FORCE.

[1842.]

Göttingen time..... Observatory time.....	<i>h. m.</i> 1 02 19 21½	Therm., Fah.	<i>h. m.</i> 1 09 19 27½	<i>h. m.</i> 1 14 19 33½	<i>h. m.</i> 1 20 19 39½	<i>h. m.</i> 1 26 19 45½	<i>h. m.</i> 1 32 19 51½	Therm., Fah.	<i>h. m.</i> 1 38 19 57½	<i>h. m.</i> 1 44 20 03½	<i>h. m.</i> 1 50 20 09½	<i>h. m.</i> 1 56 20 15½
Dec. 1.....	758.7	53.8	755.5	761.	760.4	761.	761.1	53.5	760.7	759.4	759.7	764.3
2.....	767.	59.7	763.7	765.2	760.5	766.4	767.7	60.2	765.9	767.6	768.2	767.5
3.....	773.	69.6	778.9	778.8	780.1	778.3	777.1	64.8	779.1	779.4	779.4	780.
4.....	778.	63.	776.6	776.5	777.2	777.	775.5	63.	775.7	774.6	772.2	772.4
5.....	781.7	61.5	781.5	779.5	781.8	782.2	783.	61.	782.	782.7	785.	785.
6.....	802.5	58.2	796.2	799.5	797.	796.	794.3	58.	793.2	792.9	792.	790.
7.....	812.5	57.8	807.	812.5	812.2	801.	806.7	59.	779.5	800.7	805.6	805.6
8.....	812.5	58.2	813.5	812.5	808.2	805.2	806.7	62.3	804.	806.	805.6	805.6
9.....	812.5	58.8	812.5	812.5	808.2	805.2	806.7	59.3	804.	806.	805.6	805.6
10.....	812.5	58.8	812.5	812.5	808.2	805.2	806.7	59.3	804.	806.	805.6	805.6
11.....	776.	59.2	777.4	777.	776.2	778.7	778.4	59.3	776.6	779.	778.	780.2
12.....	781.	52.	784.1	783.7	787.2	785.2	784.2	51.9	783.	784.4	785.	787.7
13.....	774.3	56.	773.4	773.7	773.3	771.4	773.5	56.	773.5	773.	772.6	773.2
14.....	788.	65.	787.8	787.3	788.	789.7	790.5	64.9	791.7	794.2	795.5	798.5
15.....	784.	61.	783.6	786.2	786.5	785.	787.2	61.	786.3	786.7	785.	785.2
16.....	750.1	55.2	751.2	751.5	753.3	754.3	752.3	55.5	753.5	753.5	751.8	753.4
17.....	778.7	55.8	773.7	772.1	770.5	773.	775.7	56.3	777.7	776.5	776.5	776.7
18.....	779.7	58.	780.	779.7	776.7	780.7	784.	58.	780.7	781.7	779.7	781.
19.....	774.7	59.	772.	774.	774.1	770.2	774.9	59.3	775.2	775.5	773.	775.5
20.....	759.5	55.	761.	763.7	763.	771.5	770.	55.	767.2	765.	767.	769.5
21.....	744.7	48.5	743.7	746.9	746.6	747.	747.7	48.5	747.1	746.2	745.2	749.2
22.....	765.3	59.6	762.6	759.	760.	763.1	762.6	60.	764.7	765.9	766.8	765.7
23.....	772.2	59.3	770.2	771.9	771.8	771.6	771.8	59.5	770.1	770.8	.....	772.
24.....	770.7	58.	770.5	770.7	772.	770.7	774.	58.	774.7	769.5	772.	776.5
25.....	770.7	58.9	*776.	776.2	776.8	778.	776.4	58.8	775.2	776.1	*776.7	773.2
26.....	777.5	56.5	777.4	776.6	778.2	776.7	777.7	56.5	779.	774.2	774.6	773.
27.....	781.3	56.	778.8	780.2	776.5	780.5	771.	57.3	773.2	773.2	776.5	780.7
28.....	759.2	55.	757.5	765.3	761.5	762.2	758.2	55.	761.7	765.5	765.5	763.2
29.....	775.2	58.	774.5	775.4	775.1	775.6	775.6	58.2	775.5	775.5	776.	776.6
30.....	710.2		709.4	710.2	709.8	710.2	710.1		710.1	710.2	710.9	711.5
31.....												
Means.....												
Reduced to 32° Fah....												

* One minute late.

[1942.]

FIRST MINIMUM OF HORIZONTAL FORCE—Continued.

DECEMBER.]

Göttingen time Observatory time	<i>h. m.</i> 2 02 20 21½	<i>Therm., Fah.</i>	<i>h. m.</i> 2 08 20 27½	<i>h. m.</i> 2 14 20 33½	<i>h. m.</i> 2 20 20 39½	<i>h. m.</i> 2 26 20 45½	<i>h. m.</i> 2 32 20 51½	<i>Therm., Fah.</i>	<i>h. m.</i> 2 38 20 57½	<i>h. m.</i> 2 44 21 03½	<i>h. m.</i> 2 50 21 09½	<i>h. m.</i> 2 56 21 15½	<i>Therm., Fah.</i>
Dec. 1	763.	52.	759.9	759.9	759.6	760.5	764.5	52.	762.1	764.2	759.4	759.4	52.
2	768.	60.5	768.7	769.2	769.7	770.5	771.	60.6	771.1	771.7	769.5	772.9	60.7
3	780.	64.1	779.7	780.1	780.	779.	.....	64.	782.	789.5	784.5	781.3	63.9
5	771.	63.8	771.7	770.5	770.	769.7	770.3	64.	774.4	772.8	775.5	772.2	64.2
6	786.7	60.5	787.	787.	788.7	788.	789.	60.	787.7	789.5	787.7	790.7	59.6
7	788.8	58.	783.9	781.2	782.	783.8	778.9	58.	781.	776.	781.7	781.6	58.
8	782.3	53.3	784.	.....	.....	783.8	783.	58.	782.	780.5	781.2	775.	58.
9	811.	62.	813.7	816.5	816.8	816.8	815.5	62.1	812.7	811.9	809.	810.	62.
10	788.5	59.2	788.5	789.2	789.	785.7	787.2	59.1	787.5	788.7	789.5	789.	59.
12	778.4	59.3	778.3	777.6	779.2	777.	777.1	59.3	780.4	779.7	776.5	775.7	59.3
13	787.7	52.	788.5	786.	785.5	785.1	*788.6	52.1	787.9	792.4	792.2	795.5	56.
14	775.	56.	774.5	774.6	774.	774.	771.7	56.	774.	776.	776.1	775.5	56.
15	798.7	64.	799.2	797.	793.7	798.2	799.	63.5	798.5	800.2	800.7	798.8	63.
16	784.2	60.7	784.	784.2	785.6	784.2	782.1	60.4	783.5	783.2	782.2	783.7	60.2
17	753.6	55.5	752.7	752.	752.4	755.	755.6	54.9	755.	759.5	.....	758.2	54.4
19	778.	55.	780.	778.2	776.	780.8	778.	55.	780.	778.2	779.1	778.	55.
20	778.	57.	777.7	778.	775.7	777.2	777.4	57.	777.5	777.4	779.3	779.	57.
21	773.5	59.5	772.1	768.	775.1	777.	777.2	59.8	778.4	776.7	774.7	776.7	60.
22	763.1	54.7	765.5	763.7	759.1	769.7	768.4	51.4	760.7	763.2	762.5	761.	54.2
23	747.7	48.5	746.7	749.	745.2	745.7	744.5	48.5	745.2	748.7	749.5	747.	48.5
24	766.7	60.1	767.8	762.	770.	774.5	769.8	60.3	769.3	767.3	769.8	766.6	60.5
26	772.1	59.7	770.8	771.9	771.4	770.7	768.5	60.2	769.	769.	769.9	771.8	60.7
27	776.	57.8	776.2	779.5	779.6	780.	782.1	57.6	788.	784.	780.7	.....	57.4
28	776.8	58.7	769.	773.5	766.	772.6	773.5	58.6	774.5	772.2	771.1	773.7	58.5
29	771.5	57.	774.2	772.5	771.7	770.	774.4	57.5	773.2	773.5	772.9	773.	58.
30	779.	57.5	779.	777.5	777.2	780.5	780.	57.7	779.2	778.2	774.9	781.1	57.9
31	762.5	55.3	764.7	763.7	762.	765.	765.7	55.6	769.	769.	764.4	765.2	55.8
Means	776.3	58.	776.5	775.5	775.4	776.6	776.7	58.	777.2	777.2	777.5	776.7	58.
Reduced to 32° Fah.	711.3		711.5	710.5	710.4	711.6	712.2		712.2	712.2	712.	711.7	

* Two minutes later.

[1842.]

SECOND MINIMUM OF HORIZONTAL FORCE.

DECEMBER.]

	h. m. 16 32 9 51½	Therm., Fah.	h. m. 15 38 9 57½	h. m. 16 44 10 03½	h. m. 15 50 10 09½	h. m. 15 56 10 15½	h. m. 16 02 10 21½	Therm., Fah.	h. m. 16 08 10 27½	h. m. 16 14 10 33½	h. m. 16 20 10 39½	h. m. 16 26 10 45½
Göttingen time.....												
Observatory time.....												
Dec. 1.....	783.4	57.8	785.8	786.6	789.	788.	788.3	57.3	787.7	789.4	788.3	790.8
2.....	776.5	59.7	774.7	777.	778.	.....	777.3	60.2	779.6	779.9	779.2	778.4
3.....	782.8	58.3	784.9	784.2	785.2	785.2	784.6	58.5	785.7	784.9	786.1	786.4
5.....	784.5	64.8	785.3	785.5	785.5	786.2	784.3	64.2	786.2	786.7	787.	787.
6.....	780.	62.8	779.1	782.2	782.7	781.9	784.	63.	780.9	783.1	781.1	781.8
7.....	785.	61.	787.7	787.1	787.4	786.2	787.8	61.	786.7	791.8	791.8	794.3
8.....	796.3	60.	795.3	795.7	793.2	786.3	795.6	60.8	797.	801.2	799.6	800.1
9.....	.....	61.5	794.	800.5	801.2	802.5	806.1	61.7	804.5	802.7	806.4	808.7
10.....	797.7	60.	798.5	798.	798.7	799.4	800.5	60.	800.5	802.8	803.2	804.2
12.....	784.8	58.	784.5	783.7	785.9	785.	785.	58.	787.7	789.5	791.2	790.9
13.....	762.5	50.2	762.2	761.5	764.9	770.7	765.6	49.5	766.8	765.2	767.6	765.1
14.....	773.5	53.	771.5	774.6	775.2	776.3	779.	53.	777.2	779.5	782.5	782.2
15.....	777.7	58.1	787.	786.4	788.	790.	783.4	58.7	796.4	794.4	798.1	798.4
16.....	783.8	59.2	784.1	787.2	786.	790.	788.7	59.9	791.8	788.7	792.7	793.
17.....	765.7	53.1	768.2	769.1	770.	771.4	773.	52.8	774.4	773.8	777.2	776.5
19.....	779.9	53.3	781.6	784.1	786.4	786.8	789.8	53.	793.	795.1	794.	798.7
20.....	771.5	55.7	774.	776.	777.2	783.3	779.1	56.4	778.7	783.6	.....	780.5
21.....	791.	59.3	791.4	790.6	793.	793.2	794.4	59.5	795.5	795.8	798.5	797.8
22.....	775.	57.5	777.1	777.5	777.5	780.2	781.6	57.4	783.	785.5	786.7	786.7
23.....	759.7	48.4	761.	761.5	761.5	758.	764.2	48.5	766.2	766.1	768.3	769.5
24.....	773.5	47.3	775.3	777.	777.3	776.9	777.8	47.9	778.	779.1	780.1	780.7
26.....	781.6	57.	779.7	784.1	784.7	787.5	789.	57.2	790.5	792.5	792.5	794.1
27.....	779.3	59.1	784.2	784.8	789.	789.5	789.4	59.	788.2	790.	793.1	793.4
28.....	774.7	57.	788.7	780.5	780.7	782.5	782.2	57.	787.2	787.	791.7	793.2
29.....	773.5	53.3	777.8	776.5	777.8	781.1	781.8	53.8	783.7	784.8	787.	788.7
30.....	758.3	53.7	759.7	759.4	759.5	763.7	766.7	54.3	768.9	769.1	771.6	775.
31.....	.....	53.2	777.	777.3	777.2	778.4	778.7	53.1	780.2	780.2	786.	785.
Means.....	778.	56.7	780.3	781.	782.	783.4	784.	56.9	785.	786.	787.6	788.2
Reduced to 32° Fah.....	716.2		718.5	719.1	720.1	721.4	721.9		722.9	723.7	725.2	725.7

[1942.]

SECOND MINIMUM OF HORIZONTAL FORCE—Continued.

December.]

Göttingen time.....	h. m.	Therm., Fah.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	Therm., Fah.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	Therm., Fah.
Observatory time.....	16 32 10 51½		16 38 10 57½	16 44 11 03½	16 50 11 09½	16 56 11 15½	17 02 11 21½	17 08 11 27½		17 14 11 33½	17 20 11 39½	17 26 11 45½				
Dec. 1.....	790.2	57.1	789.5	789.7	788.6	788.	787.2	791.3	57.1	791.3	789.	791.3	57.			
2.....	777.5	60.4	780.4	781.8	781.7	780.2	781.1	782.2	60.4	782.2	780.6	780.3	60.4			
3.....	786.8	59.5	784.6	787.8	787.6	788.1	789.	788.3	60.3	788.3	788.6	789.5	61.			
5.....	787.9	64.	788.8	787.8	787.4	788.	787.	786.5	64.	786.5	787.2	788.7	64.			
6.....	782.5	63.	782.5	785.5	785.3	786.2	786.6	788.5	62.6	788.5	788.3	790.3	63.4			
7.....	794.8	60.7	793.5	791.8	791.1	800.1	795.5	794.	60.7	796.5	796.4	795.3	61.			
8.....	801.2	60.3	802.5	806.	806.4	808.7	*806.7	808.	60.1	808.	807.3	809.4	59.9			
9.....	813.9	62.	814.7	818.6	817.2	819.1	820.2	823.5	62.3	823.5	820.7	831.	62.2			
10.....	806.	59.8	803.4	803.5	802.6	805.2	806.7	804.2	59.4	804.2	806.	804.7	59.2			
12.....	793.7	58.2	796.	794.3	793.3	796.1	798.	797.8	58.4	800.	797.	793.5	58.5			
13.....	765.	49.5	766.	765.	765.	765.	771.1	770.1	49.5	770.1	771.2	770.6	49.8			
14.....	785.7	53.6	785.7	785.5	787.	787.2	787.	788.	54.2	788.	788.	788.4	54.5			
15.....	796.6	59.	798.9	800.2	801.	801.8	799.6	801.2	59.2	801.2	799.3	801.	59.3			
16.....	795.8	60.7	791.	793.2	795.4	796.2	797.2	796.	61.	796.	796.1	795.	60.7			
17.....	776.	52.5	775.6	775.1	777.	778.7	780.1	778.	52.3	778.	778.1	780.3	52.3			
19.....	797.4	53.6	797.1	799.2	798.7	797.5	797.2	798.6	52.4	798.6	799.1	796.3	52.2			
20.....	785.	57.2	782.2	784.1	786.1	783.8	788.	789.3	57.8	789.3	788.	787.3	58.4			
21.....	798.1	59.5	798.9	801.8	800.7	798.2	800.9	800.5	59.5	800.5	802.7	805.5	59.5			
22.....	787.2	57.4	785.7	786.8	786.3	786.4	787.	788.3	57.2	788.3	788.5	789.9	57.6			
23.....	771.2	48.5	770.1	769.	770.5	770.8	771.	769.8	48.2	769.8	770.8	771.4	47.8			
24.....	779.7	49.	781.7	781.7	783.6	778.2	781.2	779.1	50.5	779.1	780.4	782.2	51.3			
26.....	795.7	57.4	795.	796.8	794.7	796.7	795.9	796.	57.6	797.	796.	798.8	57.6			
27.....	795.4	58.9	796.4	791.7	795.5	792.3	792.7	795.1	58.	796.1	794.9	795.2	58.9			
28.....	796.8	57.	796.6	794.1	791.6	792.3	793.7	791.7	57.	791.7	790.	789.	57.1			
29.....	788.5	54.4	791.2	791.9	791.8	792.	796.7	797.2	55.	797.2	800.2	800.9	55.2			
30.....	778.5	54.7	780.9	779.4	784.6	794.2	795.4	801.5	55.2	801.5	802.4	799.1	55.6			
31.....	788.4	53.	788.2	793.6	792.	794.7	793.3	797.	52.7	797.	797.7	797.6	52.4			
Means.....	789.5	57.	789.5	790.2	790.7	791.5	792.3	792.8	57.2	792.8	793.8	793.6	57.2			
Reduced to 32° Fah.....	726.9		726.8	727.5	727.9	728.7	729.4	729.9		729.9	730.8	730.5				

* One minute late.

MAGNETIC OBSERVATORY

AT THE

GIRARD COLLEGE, PHILADELPHIA.

EXTRAORDINARY MAGNETIC OBSERVATIONS,

IN THE YEAR 1842.

GENERAL NOTE.

The force at the observatory was not sufficient to make observations regularly on the occasion of unusual readings of the magnetometers. The following observations were, however, made on some of the occasions during the year.

April 14, 18.]

DECLINATION MAGNETOMETER.

[1849.]

G.T.	0m.	6m.	12m.	18m.	24m.	30m.	36m.	42m.	48m.	54m.	60m.	66m.	72m.	78m.	84m.	90m.	96m.	102m.	108m.	114m.
h.																				
4.	.....	.....	.....	595.5	593.4	608.7	620.8	602.	577.7	551.6	521.6	550.4	563.6	.....	.....	.....	.....	.....	.....	.....
6.	524.5	546.2	571.5	587.9	592.6	588.3	586.6	589.5	562.7	542.3	534.3	538.3	592.5	580.2	555.5	598.3	614.2	591.3	584.6	575.5
8.	576.8	579.4	587.	599.1	587.	580.2	585.9	603.1	596.3	581.7	581.2	593.	602.2	601.	600.7	595.	593.	596.7	601.	597.7
10.	603.1	598.1	592.4	578.2	566.6	558.7	566.1	562.1	560.7	561.7	560.	561.7	561.9	555.7	566.6	557.9	558.9	571.5	571.2	.....

HORIZONTAL FORCE MAGNETOMETER.

G.T.	2m.	8m.	14m.	20m.	26m.	32m.	38m.	44m.	50m.	56m.	62m.	68m.	74m.	80m.	86m.	92m.	98m.	104m.	110m.	116m.
h.																				
4.	.....	.....	650.	652.1	646.4	648.7	668.5	717.5	7625.7	636.2	603.5	562.	.....	.....	.....	.....	.....	.....	.....	.....
6.	1748.6	744.4	753.5	756.	744.2	747.	765.8	801.5	831.7	886.3	835.1	810.1	664.4	720.1	780.9	755.	751.2	712.2	679.6	694.3
8.	8641.8	696.5	737.7	732.8	745.7	738.2	7681.	663.9	652.2	661.5	678.8	672.4	661.9	652.2	645.8	643.6	652.9	650.5	651.	6657.7
10.	6653.7	663.5	666.6	677.5	694.2	702.2	692.	693.3	706.6	709.9	690.3	663.9	662.9	642.2	618.5	625.7	616.2	606.6	605.5	.....

169° 5 F. 268° F. 267° 7 F. 267° 6 F. 267° 5 F. 267° 4 F. 267° 3 F. 267° 2 F. 267° 1 F.

VERTICAL FORCE MAGNETOMETER.

G.T.	4m.	10m.	16m.	22m.	28m.	34m.	40m.	46m.	52m.	58m.	64m.	70m.	76m.	82m.	88m.	94m.	100m.	106m.	112m.	118m.
h.																				
4.	.....	.....	678.5	671.8	676.7	691.7	707.	716.8	750.2	749.6	734.5	724.2	.....	.....	.....	.....	.....	.....	.....	768.4
6.	761.2	751.8	756.7	.....	763.7	759.2	759.8	766.4	770.1	767.5	819.4	786.3	807.	7801.4	774.1	756.6	780.5	771.4	774.4	7771.6
8.	774.8	780.9	792.2	797.8	787.4	7771.	761.2	755.9	753.5	749.	739.1	735.1	735.5	738.	735.1	735.5	737.7	740.5	737.7	7786.7
10.	785.7	784.3	792.5	787.7	7745.6	749.4	752.4	755.6	756.7	756.7	747.5	741.	737.7	735.	737.3	735.1	738.8	.....	.....	.....

169° 7 F. 270° 8 F. 269° 3 F. 270° F. 269° 3 F. 269° 2 F. 269° 1 F. 269° 0 F. 268° 5 F. 268° 4 F. 268° 3 F. 268° 2 F. 268° 1 F.

Appearances were noted at 4h. 20m., G. T.; a bright light in the N., partly obscured by clouds; at 6h., an arc of light was visible, extending to about 15° above N. Hor.

[1842.

DECLINATION MAGNETOMETER.

JUNE 4.]

G.T.	0m.	6m.	12m.	18m.	24m.	30m.	36m.	42m.	48m.	54m.	60m.	66m.	72m.	78m.	84m.	90m.	96m.	102m.	108m.	114m.
h.	566.7	566.8	595.3	617.6	616.2	621.1	581.1	581.4	503.3	533.8	548.2	545.	548.	555.4	569.7	592.4	590.7	580.	581.7	573.

HORIZONTAL FORCE MAGNETOMETER.

G.T.	2m.	8m.	14m.	20m.	26m.	32m.	38m.	44m.	50m.	56m.	62m.	68m.	74m.	80m.	86m.	92m.	98m.	104m.	110m.	116m.
h.	715.8	738.8	740.2	708.9	677.1	634.5	601.7	640.2	712.5	717.7	696.	698.8	712.7	719.	.....	.....	723.4	728.3	725.1	717.4

1 69.5 degrees Fahrenheit.

VERTICAL FORCE MAGNETOMETER.

G.T.	4m.	10m.	16m.	22m.	28m.	34m.	40m.	46m.	52m.	58m.	64m.	70m.	76m.	82m.	88m.	94m.	100m.	106m.	112m.	118m.
h.	662.5	657.7	664.3	672.1	680.9	690.	702.6	708.	701.5	701.	703.	698.6	692.2	689.2	.....	.....	657.5	656.2	657.	659.

1 69.8 degrees Fahrenheit.

[1842.]

DECLINATION MAGNETOMETER.

JULY 2.]

G.T.	0m.	6m.	12m.	18m.	24m.	30m.	36m.	42m.	48m.	54m.	60m.	66m.	72m.	78m.	84m.	90m.	96m.	102m.	108m.	114m.
h.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6...	588.4	...	...	583.	576.9	572.7	564.5	553.6	543.2	535.9	525.2	513.	500.4	487.4	475.	461.6	448.8	435.3	422.3	408.3
8...	...	...	...	...	...	...	...	610.2	604.4	596.4	585.	...	...	...	...	...	...	...	...	...

HORIZONTAL FORCE MAGNETOMETER.

G.T.	2m.	8m.	14m.	20m.	26m.	32m.	38m.	44m.	50m.	56m.	62m.	68m.	74m.	80m.	86m.	92m.	98m.	104m.	110m.	116m.
h.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6...	717.1	761.	749.6	741.5	714.4	613.1	623.3	660.8	733.5	725.8	718.2	716.7	717.3	688.4	687.4	710.	732.6	735.1	730.2	720.4
8...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

181.7 degrees Fahrenheit.

VERTICAL FORCE MAGNETOMETER.

G.T.	4m.	10m.	16m.	22m.	28m.	34m.	40m.	46m.	52m.	58m.	64m.	70m.	76m.	82m.	88m.	94m.	100m.	106m.	112m.	118m.
h.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6...	...	...	...	951.6	953.8	957.	961.2	961.9	952.3	945.6	942.	934.3	923.6	920.4	926.7	932.7	940.	941.9	939.9	934.7
8...	932.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

July 4.]

DECLINATION MAGNETOMETER.

[1842.

[97]

G.T.	0m.	6m.	12m.	18m.	24m.	30m.	36m.	42m.	48m.	54m.	60m.	66m.	72m.	78m.	84m.	90m.	96m.	102m.	108m.	114m.
h.																				
6.	608.2	596.8	597.7	596.1	587.5	613.9	607.7	582.	570.5	576.3	574.6	548.4	547.2	519.6	507.2	496.5	488.1	516.4	543.6	564.5
8.	570.5	570.	579.9	580.3	582.9	583.3	586.3	603.7	589.2	569.5	594.2	573.2	558.2	547.	566.1	590.1	606.	603.7	576.	565.2
10.	572.3	579.1	573.2	570.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

HORIZONTAL FORCE MAGNETOMETER.

G.T.	2m.	8m.	14m.	20m.	26m.	32m.	38m.	44m.	50m.	56m.	62m.	68m.	74m.	80m.	86m.	92m.	98m.	104m.	110m.	116m.
h.																				
6.	Off the scale.					949.5	883.9	897.1	927.7	943.6	985.5	Off the scale.			977.9	983.3	973.7	936.4	882.	878.3
8.	827.7	824.	825.7	847.7	884.3	898.5	873.5	844.0	833.3	884.7	821.7	861.	895.2	899.	869.2	822.7	775.5	741.5	751.	724.5
10.	8718.4	707.1	718.6	723.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Faint light in N. at 6h., Göttingen time.

176°.5 Fah. 176°.5 Fah. 175°.9 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah. 176°.5 Fah.

VERTICAL FORCE MAGNETOMETER.

G.T.	4m.	10m.	16m.	22m.	28m.	34m.	40m.	46m.	52m.	58m.	64m.	70m.	76m.	82m.	88m.	94m.	100m.	106m.	112m.	118m.
h.																				
5.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7.	922.1	935.5	939.5	950.	964.2	959.	941.9	922.2	910.9	883.3	872.9	863.	862.5	861.8	863.8	864.8	854.8	859.1	854.2	859.
9.	916.4	909.	909.1	894.6	877.	833.	835.1	824.5	819.9	822.7	820.2	817.	817.5	.....	.....	.....	.....	.....	.....	.....

177°.7 Fah. 177°.3 Fah. 176°.6 Fah. 176°.6 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah. 176°.4 Fah.

SEPTEMBER 2.]

DECLINATION MAGNETOMETER.

[1842.

G.T.	0m.	6m.	12m.	18m.	24m.	30m.	36m.	42m.	48m.	54m.	60m.	66m.	72m.	78m.	84m.	90m.	96m.	102m.	108m.	114m.
h.	568.4	566.	565.9	562.7	564.5	563.2	568.5	570.	573.8	580.8	585.7	586.7	584.5	582.3	580.3	578.6	.....	.....	.....	.....
103																				

HORIZONTAL FORCE MAGNETOMETER.

G.T.	2m.	8m.	14m.	20m.	26m.	32m.	38m.	44m.	50m.	56m.	62m.	68m.	74m.	80m.	86m.	92m.	98m.	104m.	110m.	116m.
h.	762.	746.7	743.	735.1	730.7	740.4	726.6	739.8	735.7	737.2	736.7	735.	743.	745.5	747.7	748.9	.....	.....	.....	.....

173.9 degrees Fahrenheit.

273.5 degrees Fahrenheit.

VERTICAL FORCE MAGNETOMETER.

G.T.	4m.	10m.	16m.	22m.	28m.	34m.	40m.	46m.	52m.	58m.	64m.	70m.	76m.	82m.	88m.	94m.	100m.	106m.	112m.	118m.
h.	784.	786.8	784.6	784.3	785.3	784.4	.....	.....	.....	787.5	783.7	784.6	787.8	788.4	790.2	792.	790.	788.5	786.1	786.1
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

174.4 degrees Fahrenheit.

274.9 degrees Fahrenheit.

At 8h. 2m., Göttingen time, a bright light, extending on each side of N. point about 15°, and to about 6° above the horizon. At 8h. 29m., light spreading, and becoming more faint. At 8h. 52m., light faint, and gradually subsiding.

NOVEMBER 21, 32.]

DECLINATION MAGNETOMETER.

[1842.

G.T.	0m.	6m.	13m.	19m.	24m.	30m.	36m.	42m.	48m.	54m.	60m.	66m.	72m.	78m.	84m.	90m.	96m.	102m.	108m.	114m.
h.
1...
3...
5...
7...

HORIZONTAL FORCE MAGNETOMETER.

G.T.	2m.	8m.	14m.	20m.	26m.	32m.	38m.	44m.	50m.	56m.	62m.	68m.	74m.	80m.	86m.	92m.	98m.	104m.	110m.	116m.
h.
4...
6...

154° 4 Fah. 56° 2 Fah. 54° 4 Fah. 58° 2 Fah. 56° 6 Fah.

VERTICAL FORCE MAGNETOMETER.

G.T.	4m.	10m.	16m.	22m.	28m.	34m.	40m.	46m.	52m.	58m.	64m.	70m.	76m.	82m.	88m.	94m.	100m.	106m.	112m.	118m.
h.
1...
3...
5...
7...

160° 2 Fah. 62° 6 Fah. 60° 2 Fah. 58° 6 Fah. 61° 7 Fah. 59° 6 Fah. 63° Fah.

At 4h. 3m., Gött. time, a very luminous arc, extending to about 15° above Hor., and about 90° along it, in the N.; 4h. 18m., light slightly increasing; 4h. 33m., a slight decrease of light; 4h. 58m., light alternately appearing and disappearing; 5h. 13m., 4 streamers of unusual brightness, reaching 30° above Hor.; 5h. 16m., light particularly bright in NW., from whence a large streamer of 20° is shooting; also, one due N. of 15°; 5h. 20m., light subsided, no streamers; 5h. 23m., small streamers appearing; 5h. 26m., large streamers, attended with great light, in NW.; 5h. 28m., the arc still remains about 15° above Hor., but has shortened its chord to 30°—no streamers; 5h. 31m., arc scarcely visible; 5h. 3m., two arcs visible; 6h. 9m., a large streamer of 30° in length; 6h. 18m., considerable light, without the arc; 6h. 48m., light very faint; 7h. 3m., slight appearances of an arc; 7h. 13m., faint streamer of 10°, 7h. 38m., faint streamer of 30°; 7h. 48m., 2 faint streamers; 8h. 13m., several faint streamers; 8h. 28m., 1 large but faint streamer due N., about 30° in length; light has nearly disappeared; 8h. 43m., light scarcely visible; 9h. 13m., no light visible, and instruments quiet.

MAGNETIC OBSERVATORY,

AT THE

GIBARD COLLEGE, PHILADELPHIA.

**OBSERVATIONS OF THE TIME OF VIBRATION OF THE
MAGNETOMETER BARS.**

GENERAL NOTES.

It was intended that observations of the time of vibration of each of the magnetometer bars should be made once a month, and directions were given to that effect in the autumn of 1841. The few series of observations actually taken are recorded in the following table.

The copper dampers were removed from the magnetometer during the observations, and the trouble and danger of disturbing the adjustments of the magnetometer, while handling the case of the instrument, may serve to explain the discontinuance of the observations.

TIME OF VIBRATION OF THE MAGNETOMETER BARS.

DATE.	DECLINOMETER.			VERTICAL FORCE MAGNETOMETER.			HORIZONTAL FORCE MAGNETOMETER.		
	Number of vibrations.	Time of one vibration.	Temperature, Fah.	Number of vibrations.	Time of one vibration.	Temperature, Fah.	Number of vibrations.	Time of one vibration.	Temperature, Fah.
1841.		min.	°		min.	°		min.	°
November 1.....	115	23.25	66.1	83	29.57	66.1	48	46.30	66.3
December 1.....	79	21.48	39.	48	30.79	39.	49	47.02	37.6
1842.									
January 6.....	134	23.88	58.7	82	29.88	58.7	..	.....	.....
February 3.....	140	23.77	72.5	..	.....	.....	47	47.49	71.
February 10.....	.....	.....	.....	102	28.06	55.9	..	.....	.....
February 24.....	.....	.....	.....	106	28.59	66.6	..	.....	.....
March 3.....	122	23.94	75.	94	28.29	75.	51	45.22	73.3
March 10.....	.....	.....	.....	114	28.20	72.3	..	.....	.....
March 17.....	.....	.....	.....	100	28.20	66.	..	.....	.....
March 31.....	.....	.....	.....	..	.....	.....	..	.....	.....
April 7.....	110	23.94	72.	108	28.07	72.	40	47.65	71.
April 14.....	.....	.....	.....	100	27.94	69.6	..	.....	.....
April 28.....	.....	.....	.....	100	28.16	64.	..	.....	.....
May 5.....	.....	.....	.....	102	27.98	69.	..	.....	.....
May 12.....	.....	.....	.....	100	27.76	64.	..	.....	.....
May 19.....	.....	.....	.....	100	27.71	73.	..	.....	.....
June 2.....	.....	.....	.....	100	28.04	70.	..	.....	.....
June 9.....	.....	.....	.....	100	27.70	70.	..	.....	.....

MAGNETIC OBSERVATORY,

AT THE

GIRARD COLLEGE, PHILADELPHIA.

OBSERVATIONS OF MAGNETIC DIP,

FROM JANUARY TO DECEMBER, 1842.

GENERAL NOTE.

Observations of the magnetic dip were made once each week, with a dip circle of six inches diameter, by Robinson, of London, made in 1836. The needles used were Nos. 1 and 2, the poles of which were reversed in each set of observations. The ends of the needles are marked A and B. The place of observation was on a marble pier, about twenty feet from the northeast angle of the observatory. The time is observatory mean time.

JANUARY 4.]

MAGNETIC DIP.

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
B	West	West	71 50	71 42	71 46	38.5	Time, 10h. A. M.; needle No. 1.
			72 04	72 03	72 03	....
			71 45	71 43	71 44	....
		East	71 32	71 36	71 34	....
			71 10	71 12	71 11	....
			71 15	71 20	71 17	....
	East	West	72 34	72 32	72 33	Taken on a tripod. Wind north, rather high. Clear.
			72 40	72 38	72 39	....
			72 35	72 34	72 34	....
		East	71 50	71 56	71 53	....
			71 50	71 58	71 54	....
			71 50	71 58	71 54	....
A	East	East	71 18	71 26	71 22	Needle No. 1 gives— With A end north 71° 56'.4 With A end south 71 55.2 Dip by 24 observations... 71 55.8
			71 18	71 24	71 21	....
			71 20	71 26	71 23	....
		West	73 00	73 00	73 00	....
			73 08	73 10	73 09	....
			72 55	72 52	72 53	....
	West	East	71 08	71 14	71 11	....
			71 10	71 18	71 14	....
			71 08	71 15	71 11	....
		West	72 06	72 10	72 08	....
			72 10	72 12	72 11	....
			72 10	72 15	72 12	....

JANUARY 11.]

[1842.]

A	West	West	71 40	71 46	71 43	33.	Time, 10h. A. M.; needle No. 1.
			71 25	71 28	71 26	....
			71 20	71 25	71 22	....
		East	71 45	71 50	71 47	....
			71 38	72 02	72 00	....
			71 58	72 00	71 59	....
	East	West	71 55	72 05	72 00	Taken on tripod, 8 feet west of the former place. Snowing.
			71 54	72 05	71 59	....
			71 58	71 58	71 58	....
		East	72 20	72 38	72 29	....
			72 30	72 28	72 29	....
			72 32	72 28	72 30	....
B	East	East	72 15	72 15	72 15	Needle No. 1 gives— With A end north 71° 58'.6 With A end south 71 58.6 Dip by 24 observations... 71 56.1
			72 05	72 05	72 05	....
			72 10	72 15	72 12	....
		West	72 38	72 38	72 38	....
			72 10	72 12	72 11	....
			72 15	72 15	72 15	....
	West	East	71 02	71 05	71 03	....
			71 38	71 32	71 30	....
			71 20	71 36	71 23	....
		West	71 35	71 40	71 37	....
			71 35	71 40	71 37	....
			71 42	71 48	71 45	....

JANUARY 18.]

MAGNETIC DIP.

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.	
B	West	West	71 45	71 48	71 46	39°	Time, 10½. A. M.; needle No. 1.	
			71 40	71 42	71 41	....	
			71 35	71 36	71 35	....	
		East	71 42	71 42	71 42		Taken in the same place as on January 4th. Clear and calm.
			71 36	71 36	71 36	....	
			71 40	71 42	71 41	....	
	East	West	72 10	72 15	72 12	Needle No. 1, with A end south, gives 71° 55'.	
			71 54	72 00	71 57	....	
			72 02	72 05	72 03	....	
		East	72 06	72 04	72 05	....	
			72 20	72 20	72 20	....	
			72 26	72 20	72 20	....	
A	East	East	72 20	72 16	72 18	Needle No. 1 gives— With A end north 72° 00'.9 With A end south 71 55 Dip by 24 observations... 71 56	
			72 10	72 18	72 14	....	
			72 08	72 14	72 11	....	
		West	72 38	72 40	72 39	....	
			72 18	72 18	72 18	....	
			72 20	72 20	72 20	....	
	West	East	71 43	71 45	71 44	....	
			71 38	71 40	71 39	....	
			71 40	71 42	71 41	....	
		West	71 48	71 46	71 47	....	
			71 42	71 40	71 41	....	
			71 40	71 38	71 39	....	
JANUARY 25.]							[1842.]	
A	West	West	71 42	71 40	71 41	31.	Time, 10½. A. M.; needle No. 1.	
			71 28	71 23	71 25	....	
			71 48	71 44	71 46	....	
		East	71 38	71 38	71 38		Taken as on the 18th. Clear; brisk wind from north.
			71 50	71 48	71 49	....	
			71 35	71 29	71 31	....	
	East	West	72 02	72 06	72 04	Needle No. 1, with A end north, gives 71° 56'.3.	
			72 04	72 10	72 07	....	
			72 00	72 08	72 04	....	
		East	72 19	72 24	72 21	....	
			72 22	72 28	72 25	....	
			72 20	72 26	72 23	....	
B	East	East	72 10	72 15	72 12	Needle No. 1 gives— With A end north 71° 56'.3 With A end south 72 04.4 Dip by 24 observations... 72 00.3	
			72 10	72 18	72 14	....	
			72 22	72 28	72 25	....	
		West	72 22	72 26	72 24	....	
			72 30	72 36	72 33	....	
			72 26	72 30	72 28	....	
	West	East	71 40	71 44	71 42	....	
			71 44	71 48	71 46	....	
			71 40	71 44	71 42	....	
		West	71 50	71 54	71 52	....	
			71 48	71 50	71 49	....	
			71 44	71 46	71 45	....	

FEBRUARY 1.]

MAGNETIC DIP.

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
B	West	West	71 45	71 40	71 42	°	Time, 10h. A. M.; needle No. 1.
			71 44	71 50	71 47	.....
			71 50	71 46	71 48	.....	Taken in the same place as on January 25th, on a marble pier.
		East	71 40	71 40	71 40	.....
			71 30	71 32	71 31	.....
			71 30	71 30	71 30	.....
	East	West	72 20	72 22	72 21	.....	Clear; wind west, moderate.
			72 12	72 14	72 13	.....
			72 16	72 18	72 17	.....
		East	72 10	72 12	72 11	.....
			72 12	72 16	72 14	.....	Needle No. 1, with A end south, gives 71° 57'.1
			72 10	72 12	72 11	.....
A	East	East	72 14	72 18	72 16	.....
			72 12	72 15	72 13	.....
			72 20	72 20	72 20	.....
		West	72 20	72 20	72 20	.....
			72 10	72 10	72 10	.....
			72 20	72 20	72 20	.....
	West	East	71 48	71 45	71 47	.....
			71 42	71 40	71 41	.....	Needle No. 1 gives—
			71 38	71 38	71 38	.....	With A end north 72° 01'.9
		West	71 55	71 52	71 53	.....	With A end south 71 57.1
			72 04	72 02	72 03	.....
			71 42	71 40	71 41	.....	Dip by 24 observations... 71 59.5

FEBRUARY 8.]

[1842.]

A	West	West	71 48	71 48	71 48	38.	Time, 10h. A. M.; needle No. 1.
			71 36	71 36	71 36	.....
			71 40	71 40	71 40	.....
		East	71 50	71 46	71 48	.....
			71 52	71 50	71 51	.....
			71 52	71 50	71 51	.....	Partially overcast.
	East	West	72 18	72 18	72 18	.....	Wind west-southwest, moderate.
			72 12	72 14	72 13	.....
			72 20	72 22	72 21	.....
		East	72 34	72 34	72 34	.....
			72 20	72 22	72 21	.....	Needle No. 1, with A end north, gives 72° 03'.6.
			72 22	72 24	72 23	.....
B	East	East	71 58	71 58	71 58	.....
			72 02	72 06	72 04	.....
			72 02	72 04	72 03	.....
		West	72 26	72 26	72 26	.....
			72 22	72 24	72 23	.....
			72 18	72 18	72 18	.....
	West	East	71 12	71 12	71 12	.....
			71 12	71 16	71 14	.....	Needle No. 1 gives—
			71 06	71 08	71 07	.....	With A end north 72° 03'.6
		West	72 06	72 08	72 07	.....	With A end south 71 55.1
			72 02	72 04	72 03	.....
			72 04	72 08	72 06	.....	Dip by 24 observations... 71 59.3

FEBRUARY 15.]

MAGNETIC DIP.

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
B	West	West	72° 00	72° 00	72° 00	25°	Time, 10½ A. M.; needle No. 1.
			71 58	71 58	71 58	....
			71 56	71 58	71 57	....
		East	71 24	71 26	71 25	....
			71 14	71 14	71 14	....
			71 12	71 10	71 11	....
	East	West	72 22	72 25	72 23	Cloudy; wind west, rather high.
			72 22	72 24	72 23	....
			72 12	72 15	72 13	....
		East	72 02	71 58	72 00	....
			71 56	71 58	71 57	....
			71 56	71 58	71 57	....
A	East	East	72 22	72 20	72 21	Needle No. 1 gives— With A end north..... 71° 59' With A end south..... 71 53.2 Dip by 24 observations... 71 56.6
			72 18	72 18	72 18	....
			72 22	72 22	72 22	....
		West	72 15	72 15	72 15	....
			72 14	72 12	72 13	....
			72 13	72 13	72 13	....
	West	East	71 38	71 40	71 39	....
			71 40	71 42	71 41	....
			71 48	71 48	71 48	....
		West	71 38	71 38	71 38	....
			71 30	71 30	71 30	....
			71 38	71 38	71 38	....
			72 22	72 20	72 21	....
			72 18	72 18	72 18	....
			72 22	72 22	72 22	....
A	West	West	71 40	71 42	71 41	33.	Time, 10½ A. M.; needle No. 1.
			71 44	71 46	71 45	....
			71 40	71 40	71 40	....
		East	71 36	71 38	71 37	....
			71 30	71 32	71 31	....
			71 32	71 32	71 32	....
	East	West	72 20	72 20	72 20	Clear and calm.
			72 30	72 30	72 30	....
			72 30	72 30	72 30	....
		East	72 25	72 25	72 25	....
			72 30	72 30	72 30	....
			72 24	72 24	72 24	....
			72 20	72 22	72 21	Needle No. 1 gives— With A end north..... 72° 02' With A end south..... 71 56.7 Dip by 24 observations... 71 59.3
			72 20	72 22	72 21	....
			72 20	72 22	72 21	....
B	East	East	71 48	71 50	71 49	....
			71 52	71 56	71 54	....
			71 48	71 46	71 47	....
		West	72 10	72 12	72 11	....
			71 52	71 56	71 54	....
			71 50	71 50	71 50	....
	West	East	71 38	71 40	71 39	....
			71 35	71 38	71 36	....
			71 35	71 40	71 37	....
		West	72 20	72 22	72 21	....
			72 20	72 22	72 21	....
			72 20	72 22	72 21	....

FEBRUARY 22.]

[1843.]

MARCH 1.]

MAGNETIC DIP:

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
B	West	West	71° 39'	71° 40'	71° 39'	47.5	Time, 10½ A. M.; needle No. 1.
			71 38	71 40	71 39	.....
			71 30	71 32	71 31	.....
		East	71 28	71 30	71 29	.....
			71 32	71 34	71 33	.....
			71 48	71 32	71 40	.....
	East	West	71 40	71 40	71 40	Cloudy; wind southeast, light.
			71 46	71 48	71 47	.....
			71 38	71 38	71 38	.....
		East	72 20	72 22	72 21	.....
			72 30	72 30	72 30	.....
			72 26	72 28	72 27	.....
							Needle No. 1, with A end south, gives 71° 49'.6.

MARCH 8.]

[1842.]

A	West	West	71 58	72 00	71 59'	37.5	Time 10½ A. M.; needle No. 1.
			71 56	71 58	71 57'	.....
			71 56	72 00	71 59	.....
		East	71 32	71 34	71 33	.....
			71 34	71 36	71 35	.....
			71 38	71 38	71 38	.....
	East	West	72 20	72 22	72 21	Clear; wind northwest, light.
			72 28	72 28	72 28	.....
			72 27	72 25	72 26	.....
		East	72 24	72 22	72 23	.....
			72 20	72 22	72 21	.....
			72 16	72 16	72 16	.....
							Needle No. 1, with A end north, gives 72° 04'.6.

B	East	East	72 05	72 05	72 05'	
			72 22	72 22	72 22	.....
			72 08	72 08	72 08	.....
		West	72 20	72 20	72 20	.....
			72 06	72 06	72 06	.....
			72 16	72 14	72 15	.....
	West	East	71 28	71 30	71 29	Needle No. 1 gives— With A end north 72° 04'.6. With A end south 71 51
			71 30	71 24	71 22	.....
			71 16	71 20	71 18	.....
		West	71 42	71 40	71 41	.....
			71 38	71 38	71 38	.....
			71 28	71 28	71 28	.....
							Dip by 24 observations... 71 57.8

MARCH 15.]

MAGNETIC DIP.

[1842.]

End of needle. pointed north.	Face of instru- ment.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
B	West	West	71° 45	71° 48	71° 46	43°	Time, 10h. A. M.; needle No. 1.
			71 48	71 50	71 49	....
			71 46	71 48	71 47	....
		East	71 20	71 28	71 23	....
			71 22	71 26	71 24	....
			71 28	71 30	71 29	....
	East	West	72 14	72 18	72 16	Clear and calm.
			72 12	72 12	72 12	....
			72 00	72 00	72 00	....
		East	72 10	72 10	72 10	....
			72 08	72 08	72 08	....
			72 08	72 08	72 08	....
A	East	East	72 26	72 26	72 26	
			72 24	72 24	72 24	....
			72 14	72 14	72 14	....
		West	72 22	72 25	72 23	....
			72 22	72 22	72 22	....
			72 22	72 23	72 22	....
	West	East	71 48	71 50	71 49	Needle No. 1 gives— With A end north 72° 07'.5 With A end south 71 52.7
			71 50	71 52	71 51	....
			71 50	71 50	71 50	....
		West	71 56	71 58	71 57	....
			72 00	72 00	72 00	....
			71 58	71 54	71 56	....
							Dip by 24 observations... 72 00.1

MARCH 22.]

[1842.]

A	West	West	72 00	72 02	72 01	38.	Time, 10 ^h . A. M.; needle No. 1.
			72 00	72 02	72 01		
			72 00	72 02	72 01		
		East	71 38	71 40	71 39		
			71 34	71 36	71 35		
			71 48	71 48	71 48		
	East	West	72 18	72 20	72 19		
			72 28	72 28	72 28		
			72 24	72 24	72 24		
		East	72 28	72 28	72 28		
			72 26	72 24	72 26		
			72 18	72 20	72 19		
Needle No. 1, with A end north, gives 72° 08'.2.							
B	East	East	72 08	72 08	72 08	
			72 06	72 06	72 06		
			72 06	72 06	72 06		
		West	72 22	72 22	72 22		
			72 14	72 14	72 14		
			72 20	72 20	72 20		
	West	East	71 08	71 12	71 10		
			71 12	71 16	71 14		
			71 20	71 22	71 21		
		West	72 04	72 10	72 07		
			71 58	72 06	72 02		
			71 56	72 00	71 56		
Needle No. 1 gives— With A end north 72° 08'.2 With A end south 71 55.7 <hr/> Dip by 24 observations... 72 02							

March 29.]

MAGNETIC DIP.

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fahr.	Remarks.
B	West	West	72° 06	72° 10	72° 07	43.	Time, 10h. A. M.; needle No. 1.
			72 02	72 06	72 03	....
			72 00	72 04	72 02	....
		East	71 30	71 30	71 30	....
			71 12	71 16	71 13	....
			71 04	71 06	71 05	....
	East	West	72 28	72 30	72 29	Clear and calm.
			72 28	72 28	72 28	....
			72 24	72 24	72 24	....
		East	71 52	71 54	71 53	....
			71 52	71 54	71 53	....
			71 50	71 50	71 50	....
A	East	East	72 20	72 20	72 20	
			72 22	72 22	72 22	....
			72 28	72 26	72 27	....
		West	72 22	72 22	72 22	....
			72 18	72 18	72 18	....
			72 18	72 18	72 18	....
	West	East	71 40	71 42	71 41	Needle No. 1 gives— With A end north 72° 02'.6 With A end south 71 54.9 Dip by 24 observations... 71 58.3
			71 34	71 38	71 36	....
			71 44	71 46	71 45	....
		West	71 46	71 50	71 48	....
			71 48	71 52	71 50	....
			71 42	71 46	71 44	....
APRIL 5.]							[1842.]
A	West	West	71 56	71 56	71 56	Time, 10h. A. M.; needle No. 1.
			71 56	71 56	71 56	....
			71 56	71 56	71 56	....
		East	71 50	71 54	71 52	....
			71 44	71 50	71 47	....
			71 58	71 58	71 58	....
	East	West	72 15	72 15	72 15	Mizzling rain.
			71 25	71 25	71 25	....
			71 25	71 25	71 25	....
		East	71 28	71 26	71 27	....
			71 40	71 40	71 40	....
			71 40	71 40	71 40	....
B	East	East	71 56	71 56	71 56	
			71 50	71 50	71 50	....
			71 58	71 56	71 57	....
		West	72 36	72 38	72 37	....
			72 24	72 24	72 24	....
			72 20	72 20	72 20	....
	West	East	71 32	71 34	71 33	Needle No. 1 gives— With A end north 71° 46'.4 With A end south 71 55.5 Dip by 24 observations... 71 50.9
			71 14	71 16	71 15	....
			71 14	71 14	71 14	....
		West	72 08	72 12	72 10	....
			72 00	72 00	72 00	....
			71 50	71 50	71 50	....

APRIL 12.]

MAGNETIC DIP.

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
B	West	West	71 52	71 50	71 51	60°	Time, 10h. 30m.; needle No. 1.
			72 08	72 06	72 07	....
			72 04	72 00	72 02	....
		East	71 28	71 22	71 25	....
			71 28	71 22	71 25	....
			71 16	71 12	71 14	....
	East	West	72 36	72 36	72 36	Needle makes 10 oscillations in 30 seconds of time.
			72 20	72 20	72 20	....
			72 20	72 20	72 20	....
		East	72 00	72 00	72 00	....
			72 06	72 06	72 06	....
			71 58	71 58	71 58	....
A	East	East	72 30	72 30	72 30	95.°	Needle makes 21 oscillations in 60 seconds of time.
			72 20	72 20	72 20	....
			72 25	72 27	72 26	....
		West	72 02	72 02	72 02	....
			72 16	72 16	72 16	....
			72 15	72 15	72 15	....
	West	East	72 04	72 02	72 03	Needle No. 1 gives— With A end north 72° 08'.2 With A end south 71 57 Dip by 24 observations... 72 01.6
			72 04	72 02	72 03	....
			71 56	71 54	71 55	....
		West	71 46	71 44	71 45	....
			71 52	71 50	71 51	....
			71 50	71 48	71 49	....
		East	71 50	71 48	71 49	43.	
			71 44	71 40	71 42	....
			71 58	71 54	71 56	....
B	East	East	72 04	72 04	72 04	Needle makes 22 oscillations in 61 seconds of time.
			71 52	71 52	71 52	....
			72 00	72 00	72 00	....
		West	72 10	72 10	72 10	....
			72 12	72 12	72 12	....
			72 14	72 12	72 13	....
	West	East	72 30	72 30	72 30	Needle No. 1, with A end north, gives 72° 08'.5.
			72 36	72 36	72 36	....
			72 38	72 38	72 38	43.2	
		West	72 22	72 22	72 22	43.5	
			72 18	72 18	72 18	....
			72 20	72 20	72 20	....
		East	72 06	72 04	72 05	....
			72 04	72 02	72 03	....
			71 58	71 58	71 58	....
A	East	East	71 56	71 54	71 55	Needle No. 1 gives— With A end north 72° 08'.5 With A end south 71 56.3 Dip by 24 observations... 72 01.9
			71 44	71 40	71 42	....
			71 40	71 36	71 38	....
		West	71 42	71 40	71 41	....
			71 32	71 28	71 30	....
			71 34	71 30	71 32	43.7	

* Thermometer in the sun.

APRIL 26.]

MAGNETIC DIP.

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
B	West	West	71 36	71 34	71 35	76.5	Time, 9h. 35m.; needle No. 1.
			71 32	71 30	71 31	....
			71 50	71 46	71 48	....
		East	71 54	71 50	71 52	....
			71 58	71 52	71 55	....
			71 54	71 50	71 52	76.5	
	East	West	71 48	71 48	71 48	Needle makes 21 oscillations in 60 seconds of time.
			71 40	71 40	71 40	....
			71 44	71 44	71 44	....
			72 12	72 12	72 12	....
		East	72 20	72 18	72 19	Needle No. 1, with A end south, gives 71° 52'.4.
			72 14	72 12	72 13	....
A	East	East	72 28	72 28	72 28	76.5	Time, 10h. 20m.
			72 42	72 42	72 42	....
			72 30	72 32	72 31	....
		West	72 22	72 22	72 22	....
			72 18	72 18	72 18	....
			72 10	72 10	72 10	....
	West	East	72 10	72 10	72 10	Needle No. 1 gives— With A end north..... 72° 10'.5 With A end south..... 71 52.4
			72 00	72 00	72 00	....
			72 00	72 00	72 00	....
			71 45	71 45	71 45	....
		West	71 50	71 50	71 50	Dip by 24 observations... 72 01.4
			71 50	71 50	71 50	76.5	

MAY 3.]

[1842.]

A	West	West	71 46	71 42	71 44	47.	Time, 10h. 3m.; needle No. 1.
			71 30	71 26	71 28	....
			71 58	71 56	71 57	....
		East	72 10	72 08	72 09	....
			72 10	72 06	72 08	....
			71 58	71 52	71 55	....
	East	West	72 20	72 20	72 20	Needle makes 21 oscillations in 60 seconds of time. Raining; wind west-northwest.
			72 30	72 30	72 30	....
			72 10	72 10	72 10	....
			72 40	72 40	72 40	....
		East	72 40	72 40	72 40	Needle No. 1, with A end north, gives 72° 11'.4.
			72 40	72 40	72 40	....
			72 36	72 36	72 36	....
B	East	East	72 08	72 08	72 08	Time, 10h. 35m.
			72 02	72 02	72 02	....
			72 16	72 16	72 16	....
		West	71 58	71 58	71 58	....
			72 08	72 08	72 08	....
			72 08	72 08	72 08	....
	West	East	71 56	71 54	71 55	Needle No. 1 gives— With A end north..... 72° 11'.4 With A end south..... 71 56.1
			71 46	71 44	71 45	....
			71 22	71 20	71 21	....
			71 48	71 48	71 48	....
		West	71 52	71 52	71 52	Dip by 24 observations... 72 03.7
			71 52	71 52	71 52	47.	

MAY 17.]

MAGNETIC DIP.

[1842

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
B	West	West	72° 06	72° 04	72° 05	72.5	Time, 9h. 10m.; needle No. 1.
			72 00	71 58	71 59	....
			72 06	72 04	72 05	....
		East	71 48	71 44	71 46	Needle makes 20 oscillations in 60 seconds of time. Light haze.
			71 50	71 46	71 48	....
			71 48	71 44	71 46	....
	East	West	72 10	72 10	72 10	
			72 04	72 04	72 04	....
			72 08	72 08	72 08	....
		East	72 02	72 02	72 02	Needle No. 1, with A end south, gives 71° 59'.4.
			72 00	72 00	72 00	....
			72 00	72 00	72 00	....
A	East	East	72 58	73 00	72 59	73.5	Time, 9h. 49m.
			72 56	72 58	72 57	....
			73 00	73 02	73 01	....
		West	71 40	71 40	71 40	Needle makes 21 oscillations in 62 seconds of time.
			71 50	71 50	71 40	....
			71 45	71 45	71 45	....
	West	East	72 26	72 24	72 25	Needle No. 1 gives— With A end north 72° 09'.4 With A end south 71 59.4
			72 32	72 30	72 31	....
			72 32	72 30	72 31	....
		West	71 22	71 20	71 21	Dip by 24 observations... 72 04.4
			71 34	71 30	71 32	....
			71 32	71 30	71 31	75.	
B	West	West	71 03	71 05	71 04	75.3	Time, 10h. 30m.; needle No. 2.
			70 40	70 38	70 39	....
			70 40	70 40	70 40	....
		East	72 40	72 40	72 40	Needle makes 20 oscillations in 61 seconds of time. Hazy.
			72 40	72 40	72 40	....
			72 42	72 42	72 42	....
	East	West	71 38	71 38	71 38	
			71 18	71 18	71 18	....
			71 00	71 00	71 00	....
		East	73 08	73 08	73 08	Needle No. 2, with A end south, gives 72° 02'.6.
			73 30	73 30	73 30	....
			73 32	73 32	73 32	76.	
A	East	East	71 52	71 52	71 52	76.2	Time, 10h. 57m. Needle makes 21 oscillations in 60 seconds of time.
			71 56	71 58	71 57	....
			71 58	71 58	71 58	....
		West	72 02	72 02	72 02	Needle No. 2 gives— With A end north 71° 54'.2 With A end south 72 02.6
			72 16	72 16	72 16	....
			72 28	72 28	72 28	....
	West	East	71 40	71 40	71 40	Dip by 24 observations... 71 58.4
			71 35	71 35	71 35	....
			71 38	71 38	71 38	....
		West	71 48	71 46	71 47	24 observations of needles give— No. 1 72° 04'.4 No. 2 71 58.4 Mean dip 72 01.4
			71 50	71 50	71 50	....
			71 48	71 46	71 47	77.	

MAY 24.]

MAGNETIC DIP.

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
A	West	West	71 36	71 34	71 35	70.	Time, 9h. 40m.; needle No. 1.
			71 32	71 30	71 31	....
			71 30	71 28	71 29	....
		East	72 34	72 32	72 33	....
			72 28	72 26	72 27	....
			72 34	72 36	72 35	....
	East	West	71 46	71 48	71 47	Needle makes 21 oscillations in 62 seconds of time.
			71 42	71 42	71 42	....
			71 42	71 42	71 42	....
		East	72 58	72 58	72 58	....
			73 00	73 00	73 00	....
			73 00	73 00	73 00	72.2	
B	East	East	72 04	72 02	72 03	72.	Time, 10h. 20m.; needle No. 1.
			72 18	72 18	72 18	....
			72 12	72 12	72 12	73.2	
		West	71 54	71 52	71 53	....
			72 12	72 12	72 12	....
			71 50	71 50	71 50	....
	West	East	71 34	71 32	71 33	Needle No. 1 gives— With A end north 72° 11'.6 With A end south 71 51.3
			71 10	71 08	71 09	....
			71 20	71 18	71 19	....
		West	72 02	72 00	72 01	....
			71 56	71 54	71 55	....
			71 52	71 50	71 51	73.	

MAY 31.]

[1842.]

B	West	West	71 44	71 40	71 42	62.	Time, 9h. 38m.; needle No. 1.
			71 32	71 28	71 30	....
			71 20	71 16	71 18	....
		East	71 54	71 50	71 52	....
			71 44	71 40	71 42	....
			71 42	71 38	71 40	....
	East	West	71 46	71 42	71 44	Needle makes 21 oscillations in 61 seconds of time.
			71 40	71 40	71 40	....
			71 38	71 38	71 38	....
		East	72 24	72 22	72 23	....
			72 18	72 18	72 18	....
			72 20	72 20	72 20	63.	
A	East	East	72 30	72 30	72 30	63.	Time, 10h. 24m.; needle No. 1.
			72 46	72 46	72 46	....
			72 44	72 44	72 44	....
		West	72 04	72 02	72 03	....
			72 08	72 06	72 07	....
			72 04	72 02	72 03	....
	West	East	72 00	72 00	72 00	Needle makes 20 oscillations in 60 seconds of time.
			72 08	72 06	72 07	....
			72 06	72 04	72 05	....
		West	71 40	71 40	71 40	....
			71 36	71 34	71 35	....
			71 42	71 40	71 41	64.	
						Needle No. 1 gives—	
						With A end north 72° 06'.7	
						With A end south 71 48.9	
						Dip by 24 observations... 71 57.8	

JUNE 7.]

MAGNETIC DIP.

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
A	West	West	71 46	71 44	71 45	58.	Time, 9h. 55m.; needle No. 1.
			71 50	71 44	71 47	....
			71 42	71 40	71 41	....
		East	72 10	72 08	72 09	....
			72 08	72 06	72 07	....
			72 05	72 03	72 04	....
	East	West	72 06	72 02	72 04	Needle makes 20 oscillations in 60 seconds of time.
			72 16	72 12	72 14	....
			72 10	72 06	72 08	....
		East	72 50	72 50	72 50	....
			72 50	72 50	72 50	....
			72 44	72 42	72 43	59.	
B	East	East	72 10	72 06	72 08	59.	Time, 10h. 34m.
			72 18	72 16	72 17	....
			72 10	72 06	72 08	....
		West	71 50	71 48	71 49	....
			71 54	71 54	71 54	....
			72 02	72 02	72 02	....
	West	East	71 30	71 26	71 28	Needle No. 1 gives— With A end north 72° 11'.8 With A end south 71 53.4
			71 42	71 38	71 40	....
			71 40	71 40	71 40	....
		West	71 48	71 46	71 47	....
			72 00	72 00	72 00	....
			71 50	71 46	71 48	60.	
							Dip by 24 observations... 72 02.6

JUNE 14.]

[1842.]

B	West	West	71 38	71 32	71 35	66.	Time, 9h. 25m.; needle No. 1.
			71 50	71 46	71 48	....
			71 48	71 42	71 45	....
		East	71 48	71 44	71 46	....
			71 38	71 34	71 36	....
			71 38	71 34	71 36	....
	East	West	72 04	72 02	72 03	Needle makes 20 oscillations in 61.5 seconds of time.
			72 06	72 04	72 05	....
			71 48	71 44	71 46	....
		East	72 15	72 15	72 15	....
			72 08	72 08	72 08	....
			72 12	72 12	72 12	67.5	
A	East	East	72 22	72 22	72 22	68.	Time, 10h. 8m.
			72 28	72 28	72 28	....
			72 28	72 28	72 28	....
		West	72 10	72 10	72 10	....
			72 16	72 14	72 15	....
			72 10	72 10	72 10	....
	West	East	72 00	72 00	72 00	Needle makes 22 oscillations in 60 seconds of time.
			72 10	72 10	72 10	....
			71 50	71 50	71 50	....
		West	72 00	72 00	72 00	....
			72 00	72 00	72 00	....
			71 58	71 56	71 57	68.5	
							Needle No. 1 gives— With A end north 72° 09'.1 With A end south 71 53.9
							Dip by 24 observations... 72 01

JUNE 21.]

MAGNETIC DIP.

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
A	West	West	71° 54'	71° 53'	71° 53'	75.	Time, 9h. 32m.; needle No. 1.
			71° 42'	71° 40'	71° 41'	.....
			71° 44'	71° 40'	71° 42'	.....
		East	71° 20'	71° 20'	71° 20'	Needle makes 22 oscillations in 60 seconds of time.
			71° 15'	71° 13'	71° 14'	.....
			71° 25'	71° 23'	71° 24'	.....
	East	West	72° 18'	72° 18'	72° 18'	.....
			72° 08'	72° 04'	72° 06'	.....
			72° 12'	72° 12'	72° 12'	.....
		East	72° 36'	72° 34'	72° 35'	Needle No. 1, with A end north, gives 71° 57'.1.
			72° 30'	72° 30'	72° 30'	.....
			72° 30'	72° 30'	72° 30'	76.	

JUNE 28.] [1842.]

B	West	West	72° 02'	71° 58'	72° 00'	67.	Time, 9h.; needle No. 1.
			72° 02'	71° 58'	72° 00'	.....
			71° 56'	71° 52'	71° 54'	.....
		East	71° 42'	71° 38'	71° 40'	Needle makes 23 oscillations in 61 seconds of time.
			71° 26'	71° 22'	71° 24'	.....
			71° 22'	71° 20'	71° 21'	68.2	
	East	West	72° 15'	72° 15'	72° 15'	.....
			72° 08'	72° 08'	72° 08'	.....
			72° 18'	72° 18'	72° 18'	.....
		East	71° 55'	71° 55'	71° 55'	Needle No. 1, with A end south, gives 71° 54'.3.
			71° 58'	71° 58'	71° 58'	.....
			71° 58'	72° 00'	71° 59'	71.	

JULY 13.]

MAGNETIC DIP.

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
A	West	West	72° 02'	72° 02'	72° 02'	76.	Time, 8h. 52m.; needle No. 1.
			71 54	71 56	71 55	....
			72 02	72 00	72 01	....
		East	72 10	72 08	72 09	....
			72 00	72 00	72 00	....
			71 52	71 50	71 51	....
	East	West	72 08	72 06	72 07	77.	Needle makes 21 oscillations in 60 seconds of time.
			72 16	72 14	72 15	....
			72 08	72 08	72 08	....
		East	72 40	72 40	72 40	....
			72 28	72 28	72 28	....
			72 26	72 26	72 26	78.	
B	East	East	72 12	72 12	72 12	79.	Time, 9h. 30m.
			72 10	72 10	72 10	....
			72 20	72 20	72 20	....
		West	72 12	72 10	72 11	....
			71 58	71 58	71 58	....
			71 58	71 58	71 58	....
	West	East	71 40	71 36	71 38	79.5	Needle No. 1 gives— With A end north 72° 10'.2 With A end south 71 58.3 Dip by 24 observations... 72 04.2
			71 48	71 44	71 46	....
			71 40	71 38	71 39	....
		West	72 08	72 02	72 05	....
			71 58	71 52	71 55	....
			71 50	71 46	71 48	79.2	
B	West	West	71 50	71 44	71 47	80.	Time, 9h. 27m.; needle No. 1.
			71 52	71 48	71 50	....
			71 50	71 46	71 48	....
		East	71 50	71 46	71 48	....
			71 32	71 28	71 30	....
			71 40	71 34	71 37	....
		East	71 48	71 48	71 48	81.	
			72 06	72 06	72 06	....
			71 54	71 54	71 54	....
		East	72 02	72 02	72 02	....
			72 10	72 10	72 10	....
			72 16	72 18	72 17	82.	
	East	East	72 15	72 15	72 15	82.2	Time, 10h. 18m.
			72 08	72 08	72 08	....
			72 10	72 10	72 10	....
		West	72 00	72 00	72 00	....
			71 50	71 50	71 50	....
			72 08	72 08	72 08	83.	
		East	71 36	71 32	71 34	....
			71 30	71 30	71 30	....
			71 45	71 45	71 45	....
		West	71 50	71 50	71 50	....
			71 50	71 50	71 50	....
			71 50	71 50	71 50	83.6	

JULY 19.]

[1842.]

August 9.]

MAGNETIC DIP.

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm. Fahr.	Remarks.
B	West	West	71 56	71 52	71 54	77.5	Time, 9h. 35m.; needle No. 1.
			72 00	71 56	71 58	....
			72 00	71 58	71 59	....
		East	71 38	71 34	71 36	....
			71 30	71 28	71 29	....
			71 26	71 22	71 24	....
	East	West	72 20	72 18	72 19	78.	Needle makes 23 oscillations in 59 seconds of time.
			72 00	72 00	72 00	....
			72 04	72 04	72 04	....
		East	71 54	71 52	71 53	....
			72 02	72 02	72 02	....
			72 04	72 04	72 04	79.	
A	East	East	72 10	72 12	72 11	79.	Time, 10h. 27m.
			72 14	72 14	72 14	....
			72 08	72 10	72 09	....
		West	72 30	72 30	72 30	....
			72 30	72 30	72 30	....
			72 28	72 26	72 27	....
	West	East	71 38	71 34	71 36	80.	Needle No. gives— With A end north 72° 06'.3 With A end south 71 53.5
			71 36	71 34	71 35	....
			71 38	71 34	71 36	....
		West	72 12	72 10	72 11	....
			71 58	71 56	71 57	....
			72 20	72 18	72 19	80.2	

August 16.]

[1842.]

A	West	West	72 08	72 04	72 06	79.	Time, 9h. 35m.; needle No. 1.
			72 02	71 58	72 00	....
			71 56	71 52	71 54	....
		East	71 34	71 32	71 33	....
			71 42	71 40	71 41	....
			71 34	71 32	71 33	79.5	
	East	West	72 30	72 30	72 30	Needle makes 22 oscillations in 61 seconds of time.
			72 36	72 36	72 36	....
			72 30	72 30	72 30	....
		East	72 05	72 05	72 05	....
			72 04	72 04	72 04	....
			72 18	72 18	72 18	79.7	
B	East	East	72 20	72 20	72 20	82.	Time, 10h. 20m.
			72 20	72 20	72 20	....
			72 20	72 20	72 20	....
		West	71 46	71 46	71 46	....
			71 34	71 34	71 34	....
			71 58	71 58	71 58	82.	
	West	East	71 58	71 52	71 55	Needle makes 21 oscillations in 61 seconds of time.
			71 56	71 52	71 54	....
			72 00	71 58	71 59	....
		West	71 40	71 36	71 38	....
			71 40	71 36	71 38	....
			71 38	71 32	71 35	82.5	

August 30.]

MAGNETIC DIP.

[1842.]

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
B	West	West	71 40	71 36	71 38	71.	Time, 9h. 14m.; needle No. 1.
			71 40	71 36	71 38	....
			71 40	71 36	71 38	....
		East	71 52	71 48	71 50	....
			71 52	71 50	71 51	....
			71 50	71 48	71 49	71.5	
	East	West	72 08	72 02	72 04	Needle makes 21 oscillations in 61 seconds of time.
			71 50	71 50	71 50	....
			71 50	71 50	71 50	....
			71 50	71 50	71 50	....
		East	72 22	72 24	72 23	....
			72 18	72 18	72 18	....
			72 26	72 26	72 26	72.	
A	East	East	72 20	72 20	72 20	72.	Time, 10h. 5m.
			72 15	72 15	72 15	....
			72 20	72 20	72 20	....
		West	72 25	72 25	72 25	....
			72 25	72 25	72 25	....
			72 20	72 20	72 20	72.5	
	West	East	71 40	71 38	71 39	Needle No. 1 gives— With A end north 72° 05' With A end south 71 56.2
			71 40	71 38	71 39	....
			71 40	71 38	71 38	....
			72 00	72 00	72 00	....
		West	72 04	72 00	72 02	....
			71 58	71 56	71 57	72.8	

SEPTEMBER 6.]

[1842.]

A	West	West	72 00	71 58	71 59	67.	Time, 8h. 44m.; needle No. 1.
			72 12	72 10	72 11	....
			72 05	72 03	72 04	....
		East	71 40	71 38	71 39	....
			71 48	71 44	71 46	....
			71 50	71 46	71 48	67.	
	East	West	72 20	72 20	72 20	Needle makes 20 oscillations in 50 seconds of time.
			72 24	72 24	72 24	....
			72 25	72 25	72 25	....
			72 30	72 30	72 30	....
		East	72 26	72 26	72 26	....
			72 28	72 28	72 28	....
B	East	East	72 00	72 00	72 00	68.	Time, 9h. 25m.
			72 06	72 06	72 06	....
			72 00	72 00	72 00	....
		West	72 10	72 06	72 08	....
			72 04	72 02	72 03	....
			72 12	72 10	72 11	....
	West	East	71 50	71 50	71 50	Needle No. 1 gives— With A end north 72° 10' With A end south 71 58.7
			71 50	71 50	71 50	....
			71 56	71 56	71 56	....
			72 00	72 00	72 00	....
		West	71 52	71 48	71 50	....
			71 50	71 50	71 50	69.,	

SEPTEMBER 13.]

MAGNETIC DIP.

[1843.]

End of needle pointed north	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fahr.	Remarks.
B	West	West	71 54	71 50	71 52	79.5	Time, 9h. 34m.; needle No. 1.
			71 50	71 48	71 49	....
			71 54	71 52	71 53	....
		East	71 40	71 34	71 37	....
			71 50	71 48	71 49	....
			71 48	71 44	71 46	....
	East	West	72 18	72 14	72 16	81.	Needle makes 21 oscillations in 60 seconds of time.
			72 18	72 14	72 16	....
			72 12	72 12	72 12	....
		East	72 06	72 04	72 05	....
			72 00	72 00	72 00	....
			72 10	72 10	72 10	81.	
A	East	East	72 14	72 10	72 12	82.	Time, 10h. 16m.; needle No. 1.
			72 14	72 10	72 12	....
			72 10	72 08	72 09	....
		West	71 56	71 56	71 56	....
			71 56	71 56	71 56	....
			71 50	71 48	71 49	....
	West	East	71 48	71 46	71 47	82.3	Needle makes 22 oscillations in 61.5 seconds of time.
			72 10	72 06	72 08	....
			72 02	72 00	72 01	....
		West	71 36	71 32	71 34	....
			71 50	71 48	71 49	....
			71 48	71 46	71 47	82.8	
Needle No. 1 gives—							
With A end north 71° 56'.7							
With A end south 71 58.8							
Dip by 24 observations... 71 57.7							

SEPTEMBER 27.]

[1843.]

B	West	West	71 50	71 48	71 49	61.	Time, 9h. 20m.; needle No. 1.
			71 50	71 46	71 48	....
			71 50	71 46	71 48	....
		East	71 42	71 40	71 41	....
			71 42	71 40	71 41	....
			71 42	71 40	71 41	....
	East	West	72 02	72 00	72 01	62.	Needle makes 22 oscillations in 61 seconds of time.
			71 50	71 50	71 50	....
			71 56	71 56	71 56	....
		East	72 08	72 06	72 07	....
			72 12	72 10	72 11	....
			72 24	72 22	72 23	64.	
A	East	East	72 10	72 10	72 10	65.5	Time, 10h. 6m.; needle No. 1.
			72 34	72 34	72 34	....
			71 54	71 54	71 54	....
		West	72 22	72 22	72 22	....
			72 34	72 34	72 34	....
			72 32	72 32	72 32	66.5	
	West	East	71 48	71 46	71 47	Needle makes 21 oscillations in 60 seconds of time.
			71 34	71 32	71 33	....
			71 32	71 38	71 35	....
		West	72 18	72 16	72 17	....
			72 14	72 12	72 13	....
			72 14	72 10	72 12	68.	
						Needle No. 1 gives—	
						With A end north 72° 08'.6	
						With A end south 71 54.6	
						Dip by 24 observations... 72 01.6	

OCTOBER 11.]

MAGNETIC DIP.

[1842.]

End of needle. pointed north.	Face of instru- ment.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
A	West	West	72° 04'	72° 02'	72° 03'	61.	Time, 11h. 4m.; needle No. 2.
			71 58	71 56	71 57	....
			71 50	71 50	71 50	....
		East	71 20	71 20	71 20	....
			71 30	71 28	71 29	....
			71 30	71 28	71 29	61.5	
	East	West	72 10	72 10	72 10	Needle makes 21 oscillations in 60 seconds of time.
			72 12	72 12	72 12	....
			72 02	72 02	72 02	....
		East	71 52	71 52	71 52	....
			71 54	71 54	71 54	....
			71 58	71 58	71 58	62.	
B	East	East	72 20	72 20	72 20	62.	Time, 11h. 30m. Needle makes 22 oscillations in 62 seconds of time. Needle No. 2 gives— With A end north 71° 51'.3 With A end south 72 03.2
			72 24	72 26	72 25	....
			72 22	72 24	72 23	....
		West	72 16	72 16	72 16	....
			72 10	72 10	72 10	....
			72 28	72 28	72 28	....
	West	East	71 56	71 54	71 55	63.	Dip by 24 observations... 71 57.2 24 observations of needles give— No. 1..... 72° 01' No. 2..... 71 57.2 Mean dip..... 71 59.1
			71 56	71 54	71 55	....
			71 50	71 48	71 49	....
		West	71 40	71 40	71 40	....
			71 38	71 34	71 36	....
			71 42	71 40	71 41	63.	

NOVEMBER 1.]

[1842.]

A	West	West	71 54	71 52	71 53	47.5	Time, 9h. 46m.; needle No. 1.
			71 54	71 52	71 53	....
			72 04	72 02	72 03	....
		East	72 00	71 58	71 59	....
			72 00	72 00	72 00	....
			71 58	71 58	71 58	49.	
	East	West	72 12	72 10	72 11	Needle makes 20 oscillations in 56 seconds of time.
			72 14	72 10	72 12	....
			72 20	72 18	72 19	....
		East	72 30	72 28	72 29	....
			72 40	72 40	72 40	....
			72 46	72 46	72 46	50.5	
B	East	East	72 18	72 16	72 17	52.	Time, 10h. 26m.
			72 28	72 24	72 26	....
			72 10	72 10	72 10	....
		West	72 26	72 23	72 25	....
			72 20	72 20	72 20	....
			72 18	72 18	72 18	54.	
	West	East	71 52	71 52	71 52	Needle No. 1 gives— With A end north 72° 11'.9 With A end south 72 01.5 Dip by 24 observations... 72 07.2
			71 32	71 30	71 31	....
			71 28	71 28	71 28	....
		West	71 54	71 54	71 54	....
			71 50	71 48	71 49	....
			71 48	71 48	71 48	....

NOVEMBER 15.]

MAGNETIC DIP.

[1842.

End of needle pointed north.	Face of instrument.	Marked side of needle.	North end of needle.	South end of needle.	Mean of both readings.	Therm., Fah.	Remarks.
B	West	West	71 56	71 52	71 54	42.	Time, 9h. 26m.; needle No. 1.
			71 55	71 52	71 53	....
			71 50	71 48	71 49	....
		East	71 38	71 34	71 36	....
			71 28	71 20	71 23	....
			71 22	71 20	71 21	42.	
	East	West	72 05	72 03	72 04	Needle makes 20 oscillations in 55 seconds of time.
			72 05	72 03	72 04	....
			72 00	71 58	71 59	....
			72 10	72 08	72 09	....
		East	72 10	72 08	72 09	Needle No. 1, with A end south, gives 71° 52'.3.
			72 08	72 06	72 07	42.5	

NOVEMBER 22.]

[1842.

A	West	West	72 30	72 30	72 30	27.	Time, 9h. 57m.; needle No. 1.
			72 22	72 22	72 22	....
			72 25	72 23	72 24	....
		East	71 32	71 32	71 32	....
			71 32	71 32	71 32	....
			71 42	71 40	71 41	27.	
	East	West	72 35	72 33	72 34	Needle makes 20 oscillations in 59 seconds of time.
			72 38	72 36	72 37	....
			72 40	72 40	72 40	....
			72 18	72 18	72 18	....
		East	72 20	72 20	72 20	Needle No. 1, with A end north, gives 72° 13'.3.
			72 10	72 10	72 10	27.5	

B	East	East	72 08	72 06	72 07	28.5	Time, 10h. 29m.
			72 08	72 06	72 07	....
			72 08	72 06	72 06	....
		West	72 14	72 14	72 14	....
			72 14	72 14	72 14	....
			72 08	72 06	72 07	28.7	
	West	East	71 40	71 40	71 40	Needle No. 1 gives—
			71 28	71 24	71 26	....
			71 20	71 16	71 18	....
			72 10	72 10	72 10	....
		West	71 56	71 54	71 55	With A end north 72° 13'.3 With A end south 71 57.1
			72 02	72 00	72 01	29.	
							Dip by 24 observations... 72 05.2

MAGNETIC OBSERVATORY,

AT THE

GIRARD COLLEGE, PHILADELPHIA.

ORDINARY METEOROLOGICAL OBSERVATIONS,

FROM JANUARY TO JUNE, 1842.

GENERAL NOTES.

The following alterations occur in the instruments and records of this year, as compared with those of the last.

A barometer of the construction of F. R. Hassler, Superintendent of the Coast Survey, was placed by the side of the observatory standard, the cisterns being nearly on the same level. The tube of this barometer is nine-sixteenths of an inch in diameter. The scale is attached to a steel rod. This is recorded as barometer No. 2. It was removed in September.

The record of the motion of the different strata of clouds was quite defective, chiefly from the time which it occupied interfering with the other observations. It was not insisted on, in consequence, and is found only occasionally in the following tables.

The rain gauge is on the roof of the observatory, twenty-four feet one inch above the level of the cistern of the barometer, and thirty feet above the ground.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1843.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygt., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
1	16.8	765.35	30.048	59.7	30.134	30.051	...	35.4	31.3	.152	140	3.0	...	.7	Cu., Ci-cu., NW.
2	17.6	766.15	30.076	60.8	30.152	30.075	...	34.2	31.	.160	117	.2	...	.1	Ci-s. at Hor.
3	17.5	766.85	30.104	61.1	30.164	30.077	...	34.3	31.8	.173	106	1.0	...	.3	Cu., Ci-s., NW.
4	15.3	766.55	30.103	58.9	30.156	30.074	...	33.6	29.5	.140	82	.2	...	.3	Ci-s., Ci-cu., NW.
5	15.1	766.65	30.108	57.6	30.164	30.087	...	33.6	29.9	.147	70.	...	...	.8	Ci-s., Ci-cu., NW.
6	15.4	767.00	30.120	57.3	30.178	30.101	...	34.1	29.6	.137	66.8	...	...	1.0	Ci-s., Ci cu., N., W. by N.
7	16.6	768.00	30.153	58.4	30.224	30.144	...	34.1	29.9	.142	67.	...	...	1.0	Ci-s., Ci-cu., Cu., NW.
8	17.1	768.45	30.170	59.5	30.236	30.153	...	32.8	29.8	.151	69.	...	...	.7	Ci-s., Ci-cu., Cu.
9	18.	768.45	30.164	60.9	30.236	30.149	53.	32.6	29.8	.156	72.	...	...	...	Clear.
10	18.5	768.55	30.165	62.5	30.250	30.159	60.8	34.4	32.	.172	77.	...	...	...	A little Ci. in SW.
11	17.7	767.10	30.112	62.	30.184	30.094	58.8	38.	33.4	.158	72.	...	...	...	Clear.
12	17.2	765.55	30.053	60.	30.120	30.035	61.8	39.	35.3	.182	71.2	...	...	...	A few Ci-cu.
13	17.9	765.50	30.049	60.9	30.119	30.032	...	39.	35.4	.184	72.	...	...	...	A few Ci-cu.
14	18.6	765.35	30.039	62.9	30.102	30.009	...	39.9	36.	.186	69.	...	...	...	A few Ci-cu.
15	20.	765.35	30.032	65.	30.106	30.008	...	40.4	36.5	.190	71.3	...	...	...	Clear.
16	20.	765.35	30.032	66.	30.106	30.005	...	38.5	36.	.202	73.	...	...	...	Clear.
17	19.2	764.50	30.003	65.	30.080	29.982	...	38.5	35.5	.192	75.	...	...	...	Ci-s.
18	19.	764.30	29.996	64.7	30.068	29.970	...	36.5	34.5	.195	77.	...	...	...	Clear.
19	17.3	763.50	29.972	63.	30.040	29.947	...	35.5	34.	.197	79.3	...	...	...	Clear.
20	16.3	763.30	29.969	61.8	30.024	29.934	...	35.	33.	.185	81.	...	...	...	Clear.
21	14.9	762.25	29.934	59.1	29.984	29.902	...	34.5	32.5	.181	83.	...	...	...	Clear.
22	13.2	761.45	29.911	56.4	29.950	29.875	...	34.	33.	.196	84.	...	...	...	Clear.
23	...	...	...	...	...	...	...	...	...	...	45	1.1	...	...	Clear.

Observed dew point: 3h., 29°.4; 9h., 27°.3; 15h., 27°.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

850

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.		Dir., degrees.	Force, lbs.			
3	0	10.7	753.55	29.614	50.1	29.656	29.599	...	34.7	31.1	157	1.0	1.0	1.0	Cl-a, N., very dark.
	1	9.5	754.45	29.656	48.8	29.706	29.652	...	30.6	28.	147	1.0	1.0	1.0	Cl-a, N., very dark.
	2	8.9	756.15	29.724	47.5	29.750	29.700	...	27.	24.5	137	1.6	1.0	1.0	Cl-a, Cl-cu., N.
	3	6.9	757.10	29.772	45.2	29.814	29.770	...	24.	22.5	127	1.6	1.0	1.0	Cl-a, Cl-cu., Cl-a, NW.
	4	5.6	758.60	29.837	42.8	29.860	29.821	...	22.3	20.5	114	1.8	.3	.3	Cl-cu., Cl-a, W.
	5	4.3	760.00	29.898	40.5	29.916	29.884	...	19.2	16.	80	1.2	...	...	A few Cl-a.
	6	5.5	761.00	29.931	40.	29.968	29.937	...	18.	15.	77	1.9	...	...	Clear.
	7	9.4	762.65	29.977	43.3	30.022	29.982	...	17.4	15.3	88	1.5	...	...	Clear.
	8	11.8	764.25	30.029	48.5	30.080	30.026	...	18.8	16.4	89	.4	...	...	Clear.
	9	13.6	764.75	30.040	51.9	30.092	30.029	...	18.5	16.4	92	.1	...	...	Clear.
	10	14.7	765.00	30.044	54.1	30.100	30.032	...	19.5	17.7	101	.8	...	...	Clear.
	11	14.5	762.20	30.053	56.	30.108	30.034	...	20.5	18.	95	.5	...	...	Clear.
	12	14.6	764.75	30.036	56.1	30.084	30.010	...	22.2	20.2	110	...	...	...	A few Cl-cu.
	13	17.4	765.00	30.030	56.6	30.100	30.020	...	22.7	21.4	123	...	.3	.3	A few Cl-cu.
	14	19.	765.25	30.033	62.	30.104	30.014	44.8	24.	22.5	127	...	.2	.2	A few Cl-cu.
	15	19.6	765.70	30.043	63.9	30.138	30.043	...	26.	23.	124	...	...	...	Clear.
	16	20.	765.70	30.046	64.7	30.123	30.024	...	24.5	23.	129	...	...	...	Clear.
	17	19.5	766.15	30.067	64.9	30.148	30.050	...	22.9	21.7	126	...	...	...	Clear.
	18	18.9	765.90	30.059	63.7	30.120	30.026	...	23.5	22.	124	...	...	...	Cl-a, S.
	19	19.1	766.20	30.070	63.6	30.136	30.042	19.8	23.6	21.3	114	...	.4	.4	A few Cl-a.
	20	18.2	765.75	30.056	63.3	30.119	30.025	22.	23.7	21.4	113	...	...	...	Clear.
	21	17.3	765.00	30.031	61.7	30.080	29.991	23.	24.	22.	119	...	...	...	A few Cl-a. in W.
	22	14.	764.35	30.022	59.	30.080	29.988	22.2	23.6	19.5	87	.9	...	.1	Cl-a.
	23	16.4	764.10	30.001	59.1	30.050	29.968	22.7	23.7	21.4	113	1.0	...	...	Clear.

Observed dew point: 34., 19°.8.

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

JANUARY.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hyg., Gaussure's	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temp., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temp., Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
4	17.7	764.00	29.991	60.9	30.040	29.983	83.	26.4	25.	.141	69.	339	.6	..	.9	Very dark, N.
5	19.3	763.15	29.949	63.7	30.000	29.906	24.9	26.	24.3	.134	71.3	346	.1	..	1.0	Very dark, N.
6	19.4	762.60	29.927	64.5	29.976	29.890	...	26.7	25.4	.144	74.2	...	..	..	1.0	N., snowing.
7	17.9	760.15	29.839	63.1	29.918	29.825	...	27.7	26.5	.152	84.	349	..	..	1.0	N., snowing.
8	18.8	759.10	29.791	63.2	29.862	29.769	...	28.6	27.4	.157	83.8	317	..	..	1.0	N.
9	19.2	758.25	20.757	64.	29.818	29.723	...	30.4	29.	.165	84.3	20	..	..	1.0	Cl. a., N.
10	18.8	757.60	29.733	63.8	29.806	29.711	...	33.8	31.7	.176	84.4	27	..	..	1.0	Very dark, N.
11	19.7	757.60	29.732	63.6	29.790	29.696	...	33.9	32.1	.180	84.2	45	1.5	..	1.0	Cl. a., N.
12	20.1	757.30	29.716	66.3	29.786	29.604	...	38.6	32.1	.183	84.3	37	..	..	1.0	S., Cl. a., Cl. cu.
13	20.5	757.40	29.720	66.3	29.788	29.686	...	34.4	31.8	.173	84.5	50	..	..	1.0	Cl. a., S., N.
14	20.7	757.25	29.714	68.1	29.784	29.683	...	36.6	33.	.180	83.1	45	.1	..	1.0	A few Cu.
15	16.3	755.75	29.673	64.9	29.714	29.616	...	38.	34.8	.179	80.	40	.1	..	.8	Cu.
16	20.5	755.80	29.654	66.	29.716	29.615	...	40.5	37.3	.204	77.2	40	..	..	.8	Cu., Cl. cu.
17	20.8	755.95	29.660	67.7	29.728	29.624	...	41.5	38.5	.217	77.5	43	..	..	1.0	Cu., Cl. cu.
18	20.5	756.60	29.686	67.1	29.750	29.648	...	31.	38.	.212	76.5	40	..	..	1.0	Cu., Cl. cu.
19	20.6	757.35	29.715	67.3	29.800	29.697	...	40.3	38.	.220	79.	45	..	..	1.0	Cu., Cl. cu.
20	21.3	758.45	29.735	68.	29.840	29.734	...	39.5	37.	.210	79.	42	1.0	..	1.0	Cu., Cl. cu.
21	21.8	758.80	29.767	69.	29.862	29.753	...	38.	36.5	.217	81.	40	..	..	1.0	Cu., Cl. cu., SSW.
22	22.1	760.00	29.813	69.3	29.916	29.807	...	38.	37.	.227	83.	30	..	..	..	A few Cl. cu.
23	21.3	761.00	29.855	68.8	29.940	29.831	...	35.6	34.1	.198	86.	30	..	..	.1	Cl. cu. in N.
24	20.3	762.25	29.909	67.5	30.000	29.896	...	35.5	31.	.197	86.	52	..	..	.1	Cl. cu. in W.
25	18.5	763.00	29.946	64.6	30.062	29.966	...	33.5	29.6	.143	75.	125	.8	..	.1	Cl. cu. in W.
26	18.2	764.00	29.987	61.4	30.038	29.950	...	30.5	31.4	.174	85.	120	..	..	..	Clear.

Observed dew point: 3h, 22°.3; 9h, 27°.5; 15h, 35°.

Date.	Barometer No. 1.				Barometer No. 2.			Thermometers, Fah.			Hygt., Sausures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.					
5		0	17.3	764.50	30.012	61.	30.094	30.007	28.1	30.	28.1	154	65.7	110	..	Clear.
		1	17.4	765.50	30.050	61.2	30.118	30.031	26.6	27.8	25.4	133	89.	127	1.6	Clear.
		2	18.5	766.30	30.077	62.5	30.150	30.059	25.	27.1	23.4	108	70.6	119	..	Clear.
		3	18.5	767.45	30.122	63.2	30.200	30.107	24.	26.5	24.2	128	72.	110	..	Clear.
		4	17.3	767.50	30.130	62.1	30.204	30.114	23.5	25.7	23.	117	73.	115	..	A few Ci.-s. in S.
		5	17.	768.00	30.153	61.1	30.216	30.129	23.	25.2	23.	122	74.	115	..	A few Ci.-s. in S.
		6	16.8	768.50	30.173	60.3	30.235	30.149	22.3	24.5	22.3	119	74.3	110	..	A few Ci.-s. in S.
		7	16.5	769.90	30.229	59.7	30.302	30.218	22.7	24.4	21.7	111	74.	120	..	Ci., Ci-cu., Ci.-s., W.
		8	17.1	771.25	30.277	60.3	30.358	30.271	..	25.1	22.5	116	73.5	140	..	Ci. Cu.
		9	17.5	772.00	30.305	61.2	30.383	30.294	52.	25.5	22.5	112	73.	140	..	Clear.
		10	17.3	772.55	30.327	61.4	30.406	30.316	62.	26.6	23.6	117	72.5	135	..	.3 Ci-cu., W. by N.
		11	16.9	772.50	30.328	60.8	30.406	30.317	..	28.	24.1	110	71.5	135	..	.7 Ci-cu., W. by N.
		12	16.8	772.10	30.312	60.	30.385	30.299	..	29.1	25.1	114	71.	140	..	.9 Ci-cu., W.
		13	18.	772.25	30.312	61.2	30.388	30.299	..	29.1	25.1	114	70.3	140	..	1.0 Ci-cu., W.
		14	18.1	772.80	30.334	62.8	30.415	30.322	..	30.1	25.6	112	67.5	140	..	1.0 Ci-cu., W.
		15	17.5	773.00	30.345	62.	30.428	30.337	..	30.	25.5	112	67.3	135	..	1.0 Ci-cu., W.
		16	17.5	773.70	30.373	61.5	30.454	30.364	..	29.8	25.6	115	68.	140	..	.9 Ci-cu., W.
		17	17.5	774.70	30.412	61.3	30.486	30.396	..	29.2	26.	129	70.	117	..	1.0 Ci-cu., W.
		18	17.7	774.75	30.412	61.8	30.476	30.386	..	28.3	25.8	135	70.5	117	..	1.0 Ci-cu., W.
		19	16.8	775.60	30.452	61.3	30.506	30.416	..	28.3	26.8	150	72.	117	..	Clear.
		20	15.9	775.60	30.456	59.6	30.506	30.422	..	26.7	24.5	129	72.	117	..	Clear.
		21	16.8	775.75	30.462	57.8	30.522	30.441	..	25.8	24.	131	74.	117	..	Clear.
		22	14.9	776.15	30.481	56.8	30.528	30.460	25.	24.6	22.5	121	75.	230	..	Clear.
		23	15.6	776.50	30.492	57.	30.550	30.472	22.6	24.4	22.	117	75.2	257	..	Clear.

Observed dew point: 3h., 24°; 9h., 11°; 15h., 11° 5; 21h., 19°.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Sausures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
6	0 16.	776.50	30.490	58.2	30.546	30.465	21.3	23.	109	74.8	252	.1	..	..	Clear.
1	1 15.8	776.70	30.499	58.2	30.554	30.473	21.	22.	104	74.2	255	..	..	..	Clear.
2	2 15.2	777.10	30.517	57.6	30.562	30.483	19.1	20.5	104	73.9	255	..	..	..	Clear.
3	3 13.5	776.65	30.508	55.8	30.550	30.475	18.0	19.7	106	74.2	257	..	..	..	Clear.
4	4 13.7	776.55	30.504	55.	30.536	30.464	17.6	19.6	18.	75.	264	..	..	..	Clear.
5	5 14.5	775.90	30.474	55.7	30.524	30.451	17.2	19.2	17.5	76.	264	..	..	..	Clear.
6	6 14.	775.70	30.468	55.7	30.524	30.451	18.	19.	104	76.5	250	..	..	..	Clear.
7	7 13.2	776.15	30.489	54.7	30.540	30.469	18.7	19.6	110	78.	240	..	..	.8	Cl-cu., Cl-s.
8	8 12.7	776.40	30.502	53.6	30.534	30.466	..	20.5	110	77.5	253	..	..	1.0	Cl-cu., Cl-s., SW.
9	9 12.8	776.00	30.486	53.	30.540	30.473	..	22.1	123	78.	255	..	..	1.0	Cl-cu., Cl-s.
10	10 13.9	774.65	30.427	54.2	30.500	30.430	..	23.8	126	79.	264	..	..	1.0	Cl-cu., Cu., SSW.
11	11 15.	773.30	30.369	55.3	30.428	30.355	..	29.	147	78.	290	..	..	1.0	Cl-cu., Cl-s., N., S.
12	12 16.	772.50	30.331	57.5	30.400	30.321	..	32.6	170	78.	300	..	..	1.0	Cl-cu., Cl-s., N., S.
13	13 16.8	771.60	30.294	59.	30.360	30.278	..	35.5	161	78.5	350	..	..	1.0	Cl-s., N., S.
14	14 17.	770.30	30.241	60.	30.312	30.226	..	36.6	174	79.3	310	..	..	1.0	Cl-s., N., S.
15	15 16.3	769.50	30.213	60.	30.272	30.186	..	36.8	188	81.	320	.8	..	1.0	Cl-s., S.
16	16 16.	768.80	30.189	59.	30.250	30.167	..	37.5	194	82.	310	..	..	1.0	Cl-s., N., S.
17	17 16.5	767.70	30.143	56.9	30.200	30.118	..	36.2	199	84.5	301	..	..	1.0	N.
18	18 17.3	767.00	30.110	60.	30.180	30.095	..	36.8	211	88.	305	..	..	1.0	N.
19	19 17.	765.20	30.041	60.5	30.108	30.022	..	37.7	230	92.	335	..	.04	1.0	S., N., rain.
20	20 17.	763.80	29.966	60.5	30.048	29.962	..	38.5	240	92.	315	..	.07	1.0	S., N., rain.
21	21 17.7	762.65	29.937	60.8	30.000	29.913	..	38.5	240	95.	245	..	.10	1.0	S., N., rain.
22	22 17.4	761.00	29.873	61.6	29.950	29.862	..	41.5	264	93.9	33	..	.10	1.0	N., rain.
23	23 17.	759.85	29.831	60.9	29.900	29.813	..	41.	263	93.4	45	.2	.04	1.0	N., rain.

Observed dew point: 3h., 18°; 9h., 14°.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
7	0	19.5	758.75	29.778	62.7	29.860	29.770	...	40.5	39.9	.256	45	.1	.03	1.0	Cl-s., S., N.
	1	19.5	758.15	29.752	63.7	29.820	29.727	...	40.6	39.9	.255	53	.2	.01	1.0	Very dark.
	2	19.9	757.35	29.718	65.7	29.808	29.709	...	40.6	39.8	.254	56	1.0	.01	1.0	Very dark.
	3	18.2	756.15	29.678	64.5	29.728	29.633	...	42.	41.	.264	6	1.0	.01	1.0	N., raining.
	4	17.5	755.00	29.639	62.8	29.714	29.623	...	41.2	40.2	.256	55	1.5	.03	1.0	N., raining.
	5	18.2	754.85	29.630	62.8	29.644	29.553	...	41.	39.9	.252	41	1.9	.05	1.0	N., rain, very dark.
	6	19.2	754.85	29.626	64.2	29.700	29.606	...	41.3	40.	.251	39	1.4	.01	1.0	N., rain, very dark.
	7	19.6	755.85	29.661	65.	29.744	29.648	...	41.	39.8	.251	51	.2	.01	1.0	N., rain, very dark.
	8	19.6	755.95	29.665	65.5	29.744	29.647	...	40.2	39.4	.251	54	...	...	1.0	N., rain, very dark.
	9	19.	756.90	29.705	61.7	29.790	29.694	...	40.6	39.6	.250	65	...	...	1.0	N., rain, very dark.
	10	20.	756.60	29.688	65.	29.774	29.676	...	41.2	40.2	.255	55	...	.04	1.0	N., Cl-s., WSW.
	11	20.3	756.65	29.689	66.	29.780	29.680	...	41.4	40.4	.257	65	...	...	1.0	N., Cl-s., WSW.
	12	20.3	756.00	29.663	66.3	29.754	29.653	...	41.6	40.5	.257	75	...	...	1.0	Cl-cu., Cl-s., N., W.
	13	20.1	756.10	29.668	66.3	29.758	29.657	...	41.8	40.6	.257	70	...	...	1.0	Cl-s., N., slight rain.
	14	19.2	756.90	29.704	65.8	29.804	29.706	...	41.5	40.3	.254	50	...	.01	1.0	N., rain.
	15	19.5	757.85	29.741	65.3	29.830	29.733	...	41.4	40.	.249	50	...	.02	1.0	N., rain.
	16	19.2	758.40	29.763	65.	29.860	29.762	...	40.1	39.1	.245	50	...	.01	1.0	N., rain.
	17	19.7	758.80	29.777	64.7	29.868	29.772	...	39.5	38.3	.236	50	...	.01	1.0	N., rain.
	18	19.8	759.80	29.816	65.2	29.900	29.801	...	39.3	38.2	.236	50	...	...	1.0	N.
	19	19.8	760.90	29.860	65.	29.940	29.841	...	38.5	37.5	.231	45	...	...	1.0	N.
	20	19.1	761.60	29.889	64.7	29.970	29.873	...	38.	37.	.226	90	...	...	1.0	N.
	21	19.6	762.50	29.932	64.9	29.984	29.886	...	39.	37.	.215	80	...	...	1.0	N.
	22	19.4	763.00	29.942	65.	30.026	29.928	...	38.6	37.	.220	120	...	...	1.0	N.
	23	19.1	763.85	29.977	64.3	30.072	29.976	...	38.1	34.9	.186	149	...	...	1.0	N.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Fausseurs.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
8	19.7	764.35	29.995	65.	30.076	29.978	...	37.1	.181	76.8	176	..	..	1.0	N., Ci-s.
1	19.7	764.70	30.009	65.	30.090	29.992	...	36.6	.169	75.	176	..	..	1.0	N., Ci-s.
2	19.8	765.15	30.026	65.3	30.126	30.027	...	35.6	.160	74.9	185	..	..	.7	N., Ci-s.
3	19.	765.75	30.053	64.7	30.108	30.012	...	34.	.169	76.2	185	..	..	.4	N., Ci-s.
4	18.8	765.60	30.047	64.	30.128	30.033	33.8	32.	.183	75.6	185	..	..	.3	Ci-s.
5	19.8	766.00	30.060	64.5	30.138	30.042	30.2	32.2	.184	75.6	185	..	..	.4	Ci-s.
6	20.	766.60	30.082	65.3	30.162	30.063	...	31.5	.154	75.5	245	..	..	1.0	S., Ci-s.
7	18.5	767.00	30.104	64.	30.200	30.105	...	30.5	.145	76.5	245	..	..	1.0	Ci., Ci-s.
8	17.8	767.40	30.124	63.	30.198	30.105	...	30.7	.145	76.	245	..	..	1.0	Ci-cu., Ci., W.
9	18.	767.60	30.131	62.3	30.218	30.128	...	31.5	.146	76.	245	..	..	1.0	Ci-cu., Ci., W.
10	19.	768.30	30.153	63.	30.240	30.147	...	32.	.149	76.	240	..	..	1.0	Ci-cu., Ci-s., W.
11	20.6	767.50	30.114	65.5	30.210	30.111	...	33.5	.167	79.	245	..	..	1.0	Ci-cu., Ci-s., W.
12	21.6	767.00	30.089	67.5	30.170	30.066	...	34.	.171	79.	245	..	..	1.0	Ci-cu., Ci-s., W.
13	22.	766.50	30.069	69.5	30.154	30.044	...	34.5	.175	81.	240	..	..	1.0	Ci-cu., Ci-s., W.
14	23.2	765.50	30.041	70.	30.130	30.019	...	35.	.180	83.	250	..	..	1.0	Ci-cu., Ci-s., W.
15	23.2	765.50	30.022	71.5	30.128	30.017	...	36.	.191	83.2	250	..	..	1.0	Ci-cu., Ci-s., W.
16	23.4	765.00	30.002	71.3	30.100	29.985	...	37.5	.194	83.2	250	..	..	1.0	Ci-cu., Ci-s., W.
17	21.8	764.70	29.999	70.3	30.083	29.971	...	36.5	.195	85.2	250	..	..	1.0	Ci-s.
18	21.	764.75	30.003	69.	30.085	29.976	...	36.5	.193	86.	220	..	..	1.0	Ci-s.
19	20.2	763.85	29.972	67.3	30.073	29.969	...	35.1	.204	90.	245	..	..	1.0	N., raining.
20	19.7	762.85	29.936	66.	30.028	29.927	...	34.5	.212	90.	245	..	..	1.0	N., slight rain.
21	19.	762.90	29.941	64.8	30.030	29.933	...	35.1	.214	92.	245	..	..	1.0	N., slight rain.
22	18.	762.15	29.916	63.	30.004	29.911	...	35.2	.220	92.5	245	..	..	1.0	N., slight rain.
23	17.	761.35	29.890	61.8	29.972	29.893	...	35.5	.217	92.5	245	..	..	1.0	N., slight rain.

Observed dew point: 3h., 23°; 9h., 22°; 15h., 31° 5.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygt., Sausure's.	Wind.		Clouds, and direction of their strata.
	Temperature.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.	
10	0	769.75	30.198	67.2	30.204	30.199	...	38.6	35.5	191	80.	257	...
	1	770.00	30.206	68.2	30.206	30.098	...	38.2	35.1	187	79.6	244	...
	2	770.65	30.226	69.4	30.332	30.221	...	38.	34.6	179	77.9	252	...
	3	770.10	30.198	71.5	30.300	30.183	...	37.6	34.	173	77.8	254	...
	4	770.10	30.185	73.	30.300	30.179	...	37.8	34.4	178	77.9	239	...
	5	770.00	30.191	73.9	30.300	30.176	...	37.3	34.1	179	77.7	222	...
	6	769.70	30.180	74.3	30.280	30.155	...	36.6	33.	184	80.9	229	...
	7	769.55	30.176	73.8	30.226	30.102	...	35.6	33.5	187	84.	240	...
	8	769.75	30.190	72.2	30.288	30.169	...	34.6	32.4	177	91.6	246	...
	9	770.00	30.199	72.	30.310	30.191	...	34.9	33.	204	91.3	228	...
	10	768.80	30.156	71.3	30.256	30.140	...	34.4	33.5	200	92.3	270	...
	11	767.50	30.108	70.2	30.204	30.092	...	34.5	33.7	203	92.7	260	...
	12	767.10	30.092	69.8	30.183	30.077	...	35.	32.2	206	92.	260	...
	13	767.20	30.096	70.	30.200	30.089	...	34.	33.5	204	92.6	215	...
	14	767.40	30.099	71.3	30.208	30.093	...	34.5	34.	208	92.5	215	...
	15	768.00	30.124	71.4	30.222	30.107	...	34.5	33.7	203	92.	210	...
	16	767.80	30.117	71.	30.220	30.106	...	34.1	33.6	205	92.5	200	...
	17	769.00	30.163	70.8	30.250	30.135	...	34.2	33.5	202	92.	205	...
	18	769.15	30.168	70.7	30.257	30.142	...	34.8	34.	205	90.2	205	...
	19	769.45	30.181	71.5	30.280	30.164	...	35.	34.	203	90.	222	...
	20	769.60	30.197	72.	30.290	30.172	...	34.8	33.5	196	89.	222	...
	21	769.95	30.200	71.5	30.299	30.183	...	33.5	32.5	193	90.	221	...
	22	769.50	30.178	71.4	30.280	30.163	...	32.5	30.1	162	91.2	233	...
	23	769.65	30.179	72.8	30.286	30.167	...	32.4	30.8	175	91.1	196	...

Observed dew point: 34., 29° 6.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygt. Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Dir., degrees.	Force, lbs.			
801	11	0	766.75	30.187	73.1	30.296	30.175	...	32.3	31.2	196	...	...	...	Clear.
	1	2	769.35	30.170	72.2	30.270	30.151	...	32.4	31.1	197	...	...	...	Clear.
	2	22.1	763.80	30.195	71.	30.294	30.176	...	32.	30.8	196	...	...	...	Clear.
	3	20.1	770.00	30.213	68.	30.300	30.192	...	31.9	30.7	196	...	...	...	Clear.
	4	21.	768.15	30.186	67.5	30.280	30.166	...	31.7	30.5	197	...	...	...	Clear.
	5	22.	768.00	30.126	68.5	30.316	30.109	...	32.6	31.3	191	...	...	...	Clear.
	6	23.	768.15	30.128	70.5	30.325	30.112	...	33.5	31.	197	...	...	...	Clear.
	7	23.	767.75	30.114	71.	30.194	30.079	...	33.5	31.4	197	...	...	...	Clear.
	8	22.5	768.00	30.125	71.	30.210	30.095	...	32.3	31.	199	...	...	...	Clear.
	9	22.	768.15	30.133	70.1	30.226	30.114	...	32.3	31.5	197	...	...	...	Clear.
	10	23.	767.75	30.114	71.	30.206	30.091	...	32.9	31.9	198	...	...	...	Clear.
	11	23.5	767.00	30.081	72.	30.184	30.067	...	34.	33.	196	...	...	...	Clear.
	12	24.	765.00	29.999	72.4	30.104	29.986	...	34.6	33.6	190	...	...	...	Clear.
	13	23.2	764.10	29.968	72.	30.070	29.953	...	34.6	33.5	198	...	...	...	Clear.
	14	24.	763.20	29.998	73.	30.036	29.917	...	35.5	34.	197	...	...	...	Clear.
	15	23.7	762.80	29.915	72.6	30.033	29.904	...	35.5	34.2	197	...	...	...	Clear.
	16	23.	762.50	29.911	71.3	30.008	29.893	...	35.	34.	198	...	...	...	Clear.
	17	22.5	762.10	29.892	70.7	29.990	29.877	...	34.	33.	196	...	...	...	Clear.
	18	22.	762.15	29.847	70.	29.990	29.879	...	34.4	33.	192	...	...	...	Clear.
	19	21.8	762.15	29.898	69.3	29.980	29.871	...	33.7	32.8	195	...	...	...	Clear.
	20	21.5	762.00	29.894	69.	29.985	29.876	...	33.8	33.	198	...	...	...	Clear.
	21	21.2	761.80	29.868	68.5	29.982	29.875	...	34.4	33.9	198	...	...	...	Clear.
	22	21.6	761.60	29.877	69.	29.960	29.851	...	35.	33.5	193	...	...	...	Clear.
	23	22.	761.20	29.860	69.7	29.940	29.830	...	35.	33.5	193	...	...	...	Clear.

Observed dew point: 34., 27°.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

858

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saunures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
12	0	20.8	760.15	29.825	68.5	29.910	29.803	...	34.5	33.5	199	90.2	45	1	1.0	N.
	1	19.9	760.00	29.822	67.2	29.900	29.797	...	34.2	33	194	90.	65	...	.9	N.
	2	19.6	760.25	29.834	65.8	29.912	29.817	...	33.7	32.5	189	90.	65	...	1.0	N.
	3	19.5	760.30	29.837	65.5	29.904	29.805	...	33.7	32.5	189	89.3	55	...	1.0	N.
	4	20.3	760.00	29.821	66.	29.910	29.809	...	31.3	30.8	181	90.8	57	...	1.0	N.
	5	21.2	760.05	29.819	67.	29.910	29.807	...	31.1	30.	175	90.6	65	...	...	Clear.
	6	22.2	760.70	29.841	68.	29.930	29.824	28.3	28.7	28	166	89.2	49	...	...	Clear.
	7	19.5	760.80	29.856	66.6	29.930	29.828	26.	28.2	27.7	166	90.	69	...	.4	Cl., Cu.
	8	19.4	760.95	29.863	65.	29.932	29.834	...	29.5	28.5	166	90.7	55	...	.3	Cl.-cu.
	9	20.7	761.30	29.870	66.	29.960	29.859	...	33.5	31.7	179	86.3	55	...	.6	Cu., Cl.-cu., W.
	10	21.	761.20	29.865	67.	29.960	29.857	...	34.4	32.6	184	85.5	55	...	.7	Cl., Cu., Cl.-cu., W.
	11	21.3	760.50	29.836	68.	29.928	29.822	...	36.3	34.	188	83.7	40	...	.9	Cl., Cu., Cl.-cu., W.
	12	19.	759.00	29.787	68.	29.866	29.760	...	38.7	35.	180	76.	75	...	.8	Cl., Cu., Cl.-cu., W.
	13	21.	758.40	29.745	67.	29.850	29.747	...	38.	32.	131	66.	110	.3	.3	Cl., Cu., W. by N.
	14	22.3	756.35	29.742	69.	29.840	29.731	...	39.2	33.5	145	65.5	0	.8	.3	Cl., Cu., W.
	15	23.	758.30	29.741	70.2	29.846	29.735	...	39.8	34.1	150	66.	100	...	.2	Cl., Cu., W.
	16	22.5	759.10	29.736	70.3	29.832	29.721	...	39.3	34.5	164	66.5	75	...	.4	Cl., Cl.-cu., Cu., W.
	17	21.3	757.60	29.722	69.	29.800	29.691	...	36.5	33.5	176	72.	60	...	1.0	Cl., Cl.-cu., Cu., W.
	18	21.5	758.20	29.745	68.9	29.822	29.713	...	37.6	35.6	201	73.	17	...	1.0	N.
	19	21.8	758.30	29.747	68.9	29.862	29.753	...	37.6	34.5	183	75.	17	...	1.0	N.
	20	21.6	758.70	29.762	69.2	29.868	29.759	...	38.5	34.5	172	75.	125	...	1.0	N.
	21	21.8	758.85	29.771	69.	29.882	29.773	...	36.	34.3	197	78.5	124	...	1.0	N., snow.
	22	20.9	759.50	29.759	68.5	29.838	29.731	...	34.5	32.1	193	78.6	137	...	1.0	N.
23	21.	759.25	29.748	68.7	29.838	29.721	...	34.	32.8	193	88.4	139	...	.2	Cl.-s., S.	

Observed dew point: 94., 28° 3.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Saunures's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
13	0	21.6	758.30	29.747	68.9	29.834	29.735	...	32.6	31.5	.186	82	...	...	..	Clear.
	1	21.2	758.90	29.774	68.7	29.860	29.753	...	33.1	30.6	.175	61	...	...	.2	Cl-s.
	2	21.6	760.00	29.814	69.	29.908	29.799	...	32.5	29.6	.154	113	...	...	.2	Cl-s.
	3	21.3	761.05	29.857	69.	29.940	29.831	...	33.7	29.	.131	71.	...	...	.5	Cu.
	4	20.8	761.35	29.871	68.8	29.966	29.867	...	32.7	28.5	.133	157	...	...	1.0	Cu., N.
	5	20.7	762.40	29.913	68.2	30.020	29.914	...	31.4	26.8	.119	156	...	...	1.0	N., very dark.
	6	20.3	763.40	29.955	67.5	30.066	29.963	...	30.	27.5	.145	166	...	...	.7	Cu.
	7	19.8	764.45	29.999	66.8	30.088	29.987	...	29.5	29.3	.179	68.	...	...	.8	Cu.
	8	17.4	766.10	30.074	63.8	30.142	30.047	...	28.	24.5	.116	70.	...	...	.1	Cu., NW.
	9	19.	767.26	30.112	63.3	30.206	30.113	...	28.	24.4	.115	69.7	...	...	.4	Cu., NW.
	10	19.7	768.10	30.143	65.2	30.224	30.125	...	27.	23.	.103	68.	...	...	.1	Cu., NW.
	11	18.8	768.40	30.157	65.2	30.240	30.141	...	26.4	21.7	.090	64.	...	...	.1	Cu., NW.
	12	17.3	768.60	30.173	63.3	30.253	30.159	59.3	25.6	22.1	.104	68.	...	...	..	A few Cu.
	13	18.	768.75	30.175	63.2	30.258	30.164	58.	25.	21.5	.101	67.5	...	...	..	A few Cu.
	14	18.8	769.60	30.204	63.	30.284	30.190	58.3	26.1	21.6	.101	67.5	...	...	..	Clear.
	15	19.7	769.90	30.213	67.	30.307	30.202	56.2	25.1	21.6	.101	67.5	...	...	..	Clear.
	16	19.2	770.20	30.226	65.4	30.317	30.216	...	24.5	21.5	.107	67.5	...	...	..	Hazy in S.
	17	19.	770.50	30.239	64.3	30.325	30.227	...	22.6	19.6	.097	68.7	...	...	..	Hazy in S.
	18	...	...	...	...	...	...	...	*21.8	...	*.089	68.	...	...	..	...
	19	18.3	771.30	30.269	63.2	30.352	30.238	...	20.2	17.2	.086	70.	...	...	..	Clear.
	20	17.8	770.90	30.266	62.5	30.328	30.238	...	20.5	17.	.080	72.	...	...	..	Clear.
	21	17.1	770.60	30.253	61.5	30.320	30.230	...	20.8	18.7	.102	71.	...	...	..	Clear.
	22	16.5	770.40	30.247	61.	30.330	30.234	...	20.5	18.6	.104	71.7	...	...	..	Clear.
	23	16.3	770.00	30.231	59.5	30.300	30.216	18.	20.3	19.	.112	72.	...	...	..	Clear.

* Supplied.

Observed dew point: 34., 31° 5.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.						
14	0 17.4	769.75	30.217	60.1	30.278	30.198	17.8	20.	18.6	.109	330	.	.	.	Clear.
1	1 17.9	769.50	30.205	61.3	30.268	30.178	16.3	19.2	18.3	.112	315	.	.	.	Clear.
2	2 19.	769.35	30.194	63.6	30.260	30.165	15.5	18.6	18.	.114	270	.	2.	.	Cl. a.
3	3 18.2	768.75	30.175	63.6	30.336	30.343	12.2	19.5	18.6	.114	270	.	.	.	Clear.
4	4 17.2	767.75	30.140	62.5	30.178	30.087	11.	18.7	18.	.113	270	.	.	.	Clear.
5	5 16.1	766.30	30.085	60.7	30.136	30.050	11.9	18.7	18.5	.120	270	.	.	.	Clear.
6	6 16.3	765.55	30.058	60.	30.120	30.035	11.	18.2	18.3	.121	270	.	.	.	Clear.
7	7 17.	764.65	30.020	60.3	30.058	29.970	.....	17.5	17.5	.118	270	.	.	.3	Cl., Cl.-cu., S.
8	8 17.8	764.15	29.996	61.3	30.050	29.962	.....	30.	29.	.169	270	.	.	.6	Cl.
9	9 19.3	763.10	29.947	62.8	30.020	29.929	.....	34.7	31.8	.169	30	.	.	.6	Cl.
10	10 16.2	762.30	29.926	62.2	29.980	29.890	.....	36.6	33.8	.181	30	.	.	1.0	Cl., Cl. a.
11	11 19.1	761.00	29.866	63.	29.946	29.853	.....	37.5	34.5	.184	30	.	.	1.0	Cl., Cl. a.
12	12 19.8	759.50	29.804	66.	29.886	29.785	.....	40.	36.	.185	30	.	.	1.0	Cl., Cl. a.
13	13 19.1	758.00	29.747	66.	29.820	29.719	.....	40.5	36.5	.189	30	.	.	.9	Cl., Cl. a.
14	14 20.9	757.00	29.700	66.8	29.800	29.697	.....	42.3	38.	.198	40	.	.	.9	Cl., Cl. a.
15	15 20.5	756.70	29.689	67.7	29.782	29.678	.....	42.1	38.	.200	45	.	.	1.0	Cl., Cl. a., Cu.
16	16 20.	756.40	29.680	67.5	29.768	29.664	.....	41.7	38.1	.207	20	.	.	1.0	Cu., Cl. a.
17	17 19.5	756.00	29.667	66.4	29.720	29.618	.....	42.	38.5	.212	40	.	.	1.0	Cu., Cl.-cu., Cl. a.
18	18 19.	756.00	29.669	66.5	29.732	29.638	.....	42.	38.5	.212	40	.	.	1.0	Cu.
19	19 20.5	756.15	29.668	66.	29.750	29.649	.....	42.5	38.5	.208	53	.	.	.1	Cu.
20	20 19.6	756.00	29.666	66.3	29.729	29.629	.....	41.	38.	.212	55	.	.	.	Clear.
21	21 18.8	755.30	29.643	61.	29.710	29.624	.....	40.8	37.7	.210	79.5	.	.	.	Clear.
22	22 18.	755.75	29.665	61.3	29.782	29.645	.....	41.	37.5	.203	79	.	.	.	Clear.
23	23 18.5	755.80	29.666	62.8	29.782	29.643	.....	41.	38.	.212	70	.	.	.4	Cu.

Observed dew point : 3h., 14°, 9h., 28°, 15h., 31° 8.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fnh.			Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature.	Obs'd height.	Corr. height.	Temperature.	Obs'd height.	Corr. height.	Radiation.	Dry.	Wet.						
15	0 19.	756.00	29.670	63.7	29.736	29.642	37.	39.	36.5	306	55	..	..	..	Clear.
	1 19.8	756.70	29.695	64.5	29.760	29.664	37.	39.4	36.	192	55	..	..	..	Clear.
	2 18.4	757.30	29.724	65.3	29.785	29.687	36.5	40.5	35.	157	130	..	..	..	Clear.
	3 19.	757.75	29.739	65.8	29.816	29.720	36.3	36.	36.	346	137	..	..	..	Foggy in Hor.
	4 18.8	758.00	29.748	64.	29.816	29.731	36.	37.2	37.2	240	135	..	..	..	Foggy in Hor.
	5 18.8	758.50	29.768	63.8	29.836	29.741	36.8	37.5	37.4	240	116	..	..	..	Foggy in Hor.
	6 19.2	758.90	29.783	64.	29.848	29.753	...	36.5	36.5	234	115	..	..	..	Foggy in Hor.
	7 18.5	760.10	29.883	64.	29.910	29.815	...	36.6	35.4	223	99	..	..	..	S, Ci-cu.
	8 18.	760.50	29.862	62.8	29.910	29.817	...	36.6	34.8	210	137	..	..	..	Ci., Ci-cu., Cu.
	9 19.7	761.00	29.863	64.	29.930	29.835	...	36.2	31.	135	120	..	..	..	Ci., Ci-cu., NW.
	10 19.5	760.80	29.857	64.5	29.920	29.824	...	36.8	31.4	141	110	..	..	..	Ci-cu., NW.
	11 19.4	760.50	29.845	64.8	29.918	29.820	...	37.5	31.5	136	110	..	..	..	Ci-cu., NW.
	12 20.5	760.10	29.823	66.8	29.893	29.793	...	37.	31.	133	110	..	..	..	Ci cu., NW.
	13 22.	760.10	29.817	67.5	29.900	29.796	...	37.6	31.3	132	110	..	..	..	Cu., N., NW.
	14 23.	760.10	29.812	69.8	29.900	29.790	...	38.	31.5	131	110	..	..	..	Cu., Ci cu., NW.
	15 22.5	760.60	29.834	70.4	29.923	29.811	...	36.9	31.	133	110	..	..	..	Cu.
	16 22.2	760.60	29.837	70.	29.923	29.812	...	35.8	30.	128	110	..	..	..	Cu., Ci-cu.
	17 20.4	761.00	29.860	69.	29.933	29.824	...	35.	29.5	127	110	..	..	..	Cu., Ci-cu.
	18 19.2	761.00	29.865	66.3	29.931	29.830	...	33.5	28.	118	110	..	..	..	Cu., Ci-cu.
	19 17.7	761.75	29.902	63.	29.950	29.857	...	31.4	27.	123	115	..	..	..	A few Cu.
	20 16.8	761.80	29.909	61.	29.960	29.873	...	31.	26.5	119	110	..	..	..	Clear.
	21 17.	761.80	29.908	60.7	29.960	29.874	...	30.8	26.3	118	110	..	..	..	Clear.
	22 16.2	761.65	29.906	59.7	29.912	29.828	...	30.	26.5	113	110	..	..	..	Clear.
	23	...	...	...	...	...	...	...	...	...	...	..	..	..	Clear.

Observed dew point: 9h. 20°.5.

January.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
17	0	16.4	763.06	29.959	60.2	30.018	29.939	...	33.1	31.	.171	78.9	106	...	...	1.0	Cu., Ci s., Ci-cu.
	1	18.	763.15	29.955	60.9	30.032	29.945	...	33.4	31.4	.175	80.9	75	...	...	.9	Cu., Ci-s, Ci-cu.
	2	19.1	763.60	29.968	63.	30.050	29.957	...	31.7	29.8	.165	81.3	73	...	...	.1	Ci-s. at N. Hor.
	3	20.	763.75	29.989	64.5	30.058	29.963	...	29.9	28.6	.164	83.4	45	...	...	...	Clear.
	4	20.8	764.25	29.975	66.5	30.074	29.972	31.	31.6	30.	.170	83.9	60	...	...	.2	Ci., Ci-s., very dark.
	5	21.7	764.65	29.997	68.2	30.090	29.984	30.	32.3	30.7	.174	85.1	40	...	...	.7	Ci-s., very dark.
	6	21.7	765.10	30.014	69.3	30.100	29.990	...	32.4	31.	.178	86.5	33	...	...	.8	Ci-s., S.
	7	21.7	765.50	30.030	69.2	30.122	30.013	...	32.8	31.4	.181	87.	16	...	...	.9	Ci-s., Ci-cu.
	8	21.3	765.70	30.041	67.9	30.140	30.034	...	33.5	31.8	.181	87.	36	...	...	.9	Ci-cu.
	9	20.	766.20	30.066	67.5	30.172	30.068	...	34.6	32.6	.181	86.	30	...	...	.6	Ci., Ci-cu. NW.
	10	21.	766.00	30.053	67.7	30.167	30.063	...	37.	34.3	.185	83.	30	.2	...	.8	Ci., Ci-s., WNW.
	11	21.5	765.85	30.045	68.5	30.156	30.049	...	38.	35.	.188	81.7	35	...	...	.8	Ci., Ci-s., WNW.
	12	21.	765.00	30.013	68.5	30.116	30.009	...	39.3	35.3	.178	78.	40	1.0	...	.4	Ci., Ci-s., WNW.
	13	21.5	764.30	29.994	68.5	30.100	29.993	...	42.	36.5	.171	73.	40	1.7	...	.2	Ci., WNW.
	14	21.8	764.00	29.971	69.4	30.078	29.968	...	43.5	38.	.183	72.	50	2.0	...	.1	Ci.
	15	21.4	763.50	29.953	69.4	30.063	29.953	...	44.2	38.7	.190	72.3	35	2.0	...	.1	Ci.
	16	21.3	763.40	29.950	69.	30.058	29.949	...	43.	34.	.189	73.7	10	1.8	...	.1	Ci.
	17	21.2	763.20	29.942	68.6	30.049	29.942	...	41.2	37.3	.190	75.2	10	.3	...	...	A very little Ci s.
	18	20.7	763.00	29.936	68.2	30.040	29.934	...	39.5	37.	.210	76.2	10	.2	...	...	Clear.
	19	20.8	763.45	29.953	68.	30.052	29.946	...	38.5	36.6	.213	81.3	10	.1	...	.4	Ci., Ci-s.
	20	20.5	763.45	29.964	68.	30.052	29.946	...	37.5	35.	.194	83.	10	...	...	.1	Ci., Ci-s.
	21	20.2	763.60	29.962	67.3	30.060	29.957	...	36.5	35.5	.215	83.	10	...	...	...	Clear.
	22	20.	763.60	29.963	66.9	30.060	29.957	...	34.6	33.5	.198	83.	16	...	...	.1	Ci., Ci-s.
	23	18.9	763.25	29.954	66.7	30.066	29.937	...	36.6	34.5	.194	86.7	30	...	...	...	Clear.

Observed dew point: 3h., 25° 2; 9h., 28° 5; 15h., 30° 5.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1872.]

Date.		Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Bar.	Dir., degrees.	Force, lbs.			
18	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	2	22.3	763.80	29.960	69.6	30.050	29.940	.....	33.	32.4	.....	.....	70	.....	.....	.....	.....
	3	22.5	763.85	29.961	69.8	30.068	29.957	29.	33.2	32.5	.....	.....	30	.....	.....	.....	.....
	4	21.3	763.65	29.959	69.2	30.062	29.953	27.5	33.5	32.1	.....	.....	30	.....	.....	.....	.....
	5	20.8	763.85	29.956	68.6	30.056	29.948	29.	33.1	32.5	.....	.....	30	.....	.....	.....	.....
	6	20.	763.70	29.967	67.	30.060	29.957	26.3	31.	29.5	.....	.....	30	.....	.....	.....	.....
	7	19.3	764.40	29.998	65.5	30.100	30.001	22.2	30.3	29.5	.....	.....	30	.....	.....	.....	.....
	8	19.6	765.00	30.020	65.3	30.114	30.015	.....	31.5	30.7	.....	.....	29	.....	.....	.....	.....
	9	21.6	765.50	30.031	67.3	30.140	30.037	.....	35.2	34.3	.....	.....	29	.....	.....	.....	.....
	10	23.	766.00	30.044	69.8	30.150	30.039	70.	39.4	37.8	.....	.....	16	.....	.....	.....	.....
	11	24.1	765.90	30.034	72.	30.152	30.035	76.	42.1	39.7	.....	.....	8	.....	.....	.....	.....
	12	24.2	765.35	30.012	73.5	30.132	30.012	82.	45.2	42.	.....	.....	0	.....	.....	.....	.....
	13	24.	764.85	29.994	73.	30.113	29.994	81.	48.2	44.	.....	.....	0	.....	.....	.....	.....
	14	24.3	764.70	29.996	73.	30.112	29.993	80.5	50.6	45.5	.....	.....	0	.....	.....	.....	.....
	15	23.	764.80	29.997	73.	30.110	29.991	80.5	53.2	47.3	.....	.....	0	.....	.....	.....	.....
	16	23.2	764.80	29.995	72.5	30.110	29.992	.....	52.7	47.5	.....	.....	0	.....	.....	.....	.....
	17	22.8	764.95	30.004	71.6	30.106	29.991	.....	47.6	44.	.....	.....	359	.....	.....	.....	.....
	18	21.5	764.85	30.005	70.4	30.102	29.990	.....	46.	42.2	.....	.....	359	.....	.....	.....	.....
	19	21.8	765.15	30.016	70.5	30.112	30.000	.....	42.	39.5	.....	.....	359	.....	.....	.....	.....
	20	19.5	764.65	30.008	69.	30.106	29.997	.....	42.3	40.	.....	.....	359	.....	.....	.....	.....
	21	15.3	764.40	30.008	64.3	30.086	29.990	.....	40.5	38.7	.....	.....	359	.....	.....	.....	.....
	22	12.9	764.00	30.014	60.1	30.082	29.997	27.2	39.	37.3	.....	.....	0	.....	.....	.....	.....
23	15.9	764.20	30.007	59.2	30.084	30.002	29.	38.5	36.5	.....	.....	12	.....	.....	.....	.....

Observed dew point: 9h., 29°.2; 15h., 38°.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
19	0	20.9	765.00	30.014	64.3	30.100	30.004	25.7	37.5	35.5	.202	84.	12	.	.	Clear.
	1	23.2	765.00	30.002	70.2	30.110	30.000	25.	34.	32.7	.189	87.5	12	.	.	S. in Hor.
	2	23.5	765.15	30.007	71.	30.122	30.000	24.	34.9	33.7	.198	88.9	12	.	.	Clear.
	3	23.6	764.90	30.001	71.	30.109	29.995	22.2	34.2	33.3	.200	89.4	10	.	.	Clear.
	4	22.5	764.65	29.993	71.	30.096	29.982	22.8	33.5	32.8	.197	91.	8	.	.	Clear.
	5	19.5	763.55	29.964	63.5	30.066	29.962	24.	32.3	31.3	.184	91.5	8	.	.	Clear.
	6	19.7	763.15	29.947	63.8	30.050	29.955	24.6	31.	30.	.176	91.4	12	.	.	Clear.
	7	20.4	764.20	29.986	64.2	30.092	29.997	23.	32.	31.5	.191	92.4	12	.	.	S.
	8	19.6	764.49	29.997	64.	30.100	30.005	.....	31.4	30.9	.194	92.8	334	.	.6	Cl s.
	9	21.	764.50	29.995	67.	30.104	30.001	.....	35.6	35.	.215	92.	334	.	.3	Cl-s.
	10	21.	764.40	29.991	67.3	30.100	29.996	73.	40.8	39.3	.241	88.	340	.	.	S.
	11	21.	764.00	29.975	67.3	30.080	29.976	77.	43.1	41.1	.252	87.	365	.	.	Clear, except slight haze.
	12	22.	763.10	29.934	68.	30.050	29.944	79.	46.4	43.6	.268	85.	350	.	.	Clear, except slight haze.
	13	22.	762.25	29.901	68.5	30.016	29.909	80.	49.5	45.5	.274	79.	350	1	.	Clear, except slight haze.
	14	23.6	762.10	29.887	70.3	30.010	29.898	76.	51.7	47.	.283	77.3	335	1	.	Clear, except slight haze.
	15	24.3	762.10	29.883	72.8	30.010	29.891	75.	53.1	47.1	.270	73.	30	1	.	Clear, except slight haze.
	16	24.	762.20	29.889	73.	30.014	29.895	.....	53.	47.	.260	72.5	40	.	.	Clear.
	17	22.2	762.10	29.893	72.2	30.000	29.883	.....	50.8	46.	.271	73.6	40	.	.	Clear.
	18	22.	762.20	29.899	70.6	30.000	29.888	.....	47.9	45.	.281	76.	42	.	.	Clear.
	19	21.9	762.05	29.893	69.8	30.000	29.889	.....	44.	43.5	.292	81.5	27	.	.	Clear.
	20	22.	762.10	29.895	69.8	30.000	29.889	.....	42.	40.4	.250	85	93	.	.	Clear.
	21	22.4	762.00	29.888	70.	30.000	29.889	.....	41.	39.2	.237	86	122	.	.	Clear.
	22	21.7	762.15	29.898	69.9	29.988	29.877	.....	39.2	38.	.232	88.	132	.	.	Clear.
23	20.8	761.75	29.887	68.6	29.972	29.865	.....	39.	38.	.235	88.	220	.	.	Clear.	

- Observed dew point: 9h., 33°.4; 15h., 39°.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
20	0 19.8	761.00	29.863	67.	29.956	29.853	...	37.1	36.4	.225	88.	225	...	...	1	S., Ci-s.
	1 18.9	760.15	29.833	65.2	29.920	29.822	...	36.	35.2	.214	92.	225	...	...	1	S.
	2 19.2	760.00	29.826	64.2	29.920	29.825	...	39.	38.4	.243	93.	320	...	...	2	Ci-s. in W.
	3 20.7	760.30	29.831	66.2	29.920	29.819	...	39.5	39.3	.256	93.	320	...	...	...	Clear.
	4 20.8	759.80	29.810	67.	29.900	29.797	...	39.5	39.	.249	92.4	320	...	...	...	Clear.
	5 20.7	759.50	29.799	67.	29.900	29.797	...	36.8	36.2	.224	91.	314	...	...	...	Clear.
	6 20.3	759.45	29.799	66.5	29.888	29.787	...	37.2	37.2	.240	93.	249	...	...	8	S.
	7 19.6	759.20	29.792	66.	29.884	29.783	...	33.9	33.5	.205	92.	239	...	...	1.0	S.
	8 18.5	758.85	29.784	64.3	29.876	29.780	...	34.6	34.6	.219	92.	238	...	...	7	Fog.
	9 19.	758.50	29.768	64.	29.870	29.775	...	39.6	39.1	.250	92.	238	...	...	4	Fog.
	10 21.	758.50	29.759	65.7	29.872	29.773	77.	44.4	43.	.279	88.3	0	...	...	3	Ci., S.
	11 21.3	758.00	29.737	67.5	29.850	29.746	82.5	48.1	46.3	.309	87.	0	...	...	1	Ci.
	12 22.	757.10	29.699	69.	29.816	29.707	90.	53.	50.2	.345	84.	0	...	...	1	Ci.
	13 23.	756.25	29.660	70.	29.782	29.671	84.	58.3	53.7	.372	78.	0	...	...	2	Ci., Ci-cu.
	14 23.5	756.90	29.644	71.5	29.770	29.655	...	60.	54.5	.373	77.	0	...	...	7	Cu., Ci-cu.
	15 23.4	755.50	29.629	72.	29.754	29.637	...	59.8	54.5	.376	77.	350	2.	...	9	Ci-cu.
	16 23.5	755.25	29.619	72.3	29.742	29.625	...	58.8	53.5	.363	77.5	320	7.	...	9	Cu., Ci-cu.
	17 23.	755.00	29.612	72.	29.734	29.618	...	56.6	54.6	.415	80.	320	1.9	...	9	Ci-s., Cu., Ci-cu.
	18 22.	754.40	29.594	71.1	29.700	29.587	...	54.1	50.8	.348	82.	345	2.3	...	1.0	Cu., Ci-cu.
	19 21.3	753.80	29.574	70.	29.668	29.568	...	53.6	51.1	.360	83.	314	3.5	...	1.0	Cu., Ci-cu.
	20 21.1	752.60	29.528	69.9	29.610	29.500	...	53.	49.5	.328	81.2	320	5.	...	1.0	Cu., Ci-cu.
	21 21.5	752.75	29.532	69.5	29.620	29.512	...	52.8	48.8	.314	82.	335	3.5	...	1.0	Cu., Ci-cu.
	22 21.3	752.40	29.519	69.4	29.616	29.508	...	52.3	49.6	.337	85.2	337	5.	...	1.0	Ci-cu., N., rain.
	23 21.	750.70	29.453	69.2	29.564	29.457	...	53.2	50.8	.357	86.5	7	1.0	Ci-cu., N.

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JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
21	0 20.	749.75	29.420	68.	29.520	29.416	...	57.	54.3	.402	89.6	39	.7	...	1.0	N., rain.
	1 19.2	749.50	29.414	66.3	29.500	29.400	...	52.8	51.5	.378	88.	45	3.0	...	1.0	N.
	2 18.6	749.20	29.405	65.5	29.490	29.393	...	51.9	50.9	.374	93.2	52	.5	...	.8	Cu., Ci-cu.
	3 18.	748.50	29.380	64.	29.462	29.368	...	52.2	51.	.372	93.2	80	...	...	.5	Ci-cu.
	4 17.7	748.45	29.379	63.2	29.464	29.373	...	50.2	47.2	.305	90.4	94	.4	...	1.0	Very dark.
	5 17.5	748.15	29.369	62.5	29.454	29.365	...	47.6	45.4	.294	87.	152	...	...	1.0	Very dark.
	6 17.2	748.20	29.372	62.2	29.456	29.368	...	47.	41.9	.289	86.	155	...	...	.6	Cu., Ci-cu.
	7 16.9	747.85	29.361	61.4	29.438	29.351	...	45.	44.	.293	86.5	137	...	...	.8	Cu., Ci-cu.
	8	.....	.....	.....	.....	.....	...	.....	.....	.....	.....	.....	.....	...	...	...
	9 15.	748.75	29.405	59.	29.484	29.404	...	40.	38.	.224	86.5	170	3.0	...	1.0	Cu., Ci-cu., N., WNW.
	10 14.	748.90	29.415	57.	29.490	29.415	...	40.	36.3	.191	78.5	170	2.5	...	1.0	Cu., Ci-cu., N., WNW.
	11 13.8	748.50	29.400	56.	29.474	29.401	...	41.	37.	.193	77.5	145	2.0	...	1.0	Ci., Ci-cu., Ci-s, WSW.
	12 13.2	748.00	29.382	55.2	29.460	29.390	...	41.5	36.5	.178	74.	130	3.0	...	1.0	Ci., Ci-cu., Ci-s, WSW.
	13 13.	748.00	29.384	54.5	29.460	29.392	...	42.	35.7	.156	69.	115	4.5	...	.6	Ci., Cu., W.
	14 13.4	748.10	29.386	54.3	29.463	29.395	...	42.7	36.2	.158	67.	125	9.0	...	.4	Ci-cu., Cu., W.
	15 14.	748.80	29.411	54.5	29.490	29.422	...	41.6	35.1	.149	66.	130	10.0	...	.7	Cu., W.
	16 15.3	749.60	29.437	56.3	29.520	29.416	...	41.	35.	.155	68.	130	2.0	...	.7	Cu., W.
	17 18.	750.80	29.471	60.	29.560	29.477	...	39.5	37.5	.220	67.2	130	1.2	...	1.0	Cu., W.
	18 19.2	752.00	29.513	62.7	29.600	29.511	...	39.	37.5	.225	67.	140	1.5	...	.3	Cu., W.
	19 19.8	753.60	29.573	64.6	29.674	29.579	...	36.3	33.	.170	67.	120	4.5	...	.2	Cu., W.
	20 20.	754.50	29.607	65.3	29.706	29.603	...	35.5	32.4	.167	67.	110	5.5	...	...	Clear.
	21 20.	755.00	29.626	65.7	29.736	29.641	32.	34.9	29.8	.127	66.8	130	4.5	...	...	Cu. in N., N.
	22 20.5	756.75	29.692	66.8	29.796	29.694	32.	33.2	28.	.115	65.1	125	2.3	Cu. in N., N.
	23 20.4	757.05	29.705	66.	29.800	29.700	31.7	32.7	27.8	.117	64.3	130	3.5	Cu. in N., N.

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JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygt., Saunre's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Wet.	Dir., degrees.				Force, lbs.
22	0	18.9	757.15	29.715	65.5	29.810	29.711	31.1	32.5	27.	.112	63.	115	3.7	..	A few Cu.
	1	18.1	757.65	28.749	63.	29.830	29.737	28.5	32.5	27.	.112	64.	105	2.0	..	A few Cu.
	2	18.	758.20	29.761	61.7	29.850	29.768	27.7	31.5	28.	.138	66.	100	.1	..	A few Cu.
	3	15.3	758.60	29.790	62.	29.860	29.770	27.	31.5	28	.138	66.	65	..	.1	A few Cu.
	4	15.3	758.90	29.802	60.2	29.862	29.777	26.9	31.5	29.5	.162	67.3	60	..	..	Clear.
	5	16.	759.30	29.811	60.3	29.862	29.776	26.	31.6	31.6	.196	68.5	9	..	..	Clear.
	6	17.2	759.60	29.819	60.4	29.900	29.814	..	32.5	30.6	.171	68.8	61	.1	.6	Cu.
	7	18.8	760.30	29.839	63.	29.934	29.841	..	33.	30.3	.161	67.	61	.3	.6	Ci., Cu.
	8	19.	760.60	29.851	64.	29.934	29.839	..	33.7	32.7	.194	67.	77	.5	.4	Ci., Cu.
	9	19.	760.80	29.859	64.1	29.950	29.865	..	34.4	28.6	.118	68.3	90	1.2	.3	Cu., W.
	10	18.2	760.90	29.866	63.7	29.962	29.868	..	34.5	29.5	.115	62.5	120	2.2	.8	Cu., W.
	11	18.	760.70	29.860	63.	29.958	29.865	..	34.6	28.2	.109	62.3	110	2.2	.7	Cu., W.
	12	18.5	759.80	29.821	64.2	29.923	29.828	..	31.2	28.2	.113	63.	120	2.2	.8	Cu., W.
	13	20.7	760.10	29.823	66.	29.930	29.829	..	33.7	29.4	.118	62.7	120	1.8	.8	Cu., W.
	14	20.3	760.65	29.847	67.	29.956	29.853	..	33.8	27.6	.107	62.7	120	2.5	.9	Cu., Ci cu., W.
	15	20.5	761.20	29.867	66.8	29.968	29.866	..	33.5	28.	.117	62.	115	2.4	1.0	Cu., Ci cu., W.
	16	22.3	762.50	29.909	69.5	30.023	29.912	..	33.	27.3	.110	61.	125	2.5	.3	Cu., Ci cu., W.
	17	20.6	763.50	29.956	69.	30.060	29.951	..	31.5	27.	.121	63.	115	3.0	.3	Cu., Ci cu., W.
	18	19.	764.25	29.994	66.6	30.099	29.996	..	30.8	28.	.145	62.5	116	1.8	..	Clear.
	19	17.5	765.20	30.038	64.1	30.126	30.031	32.	29.	27.6	.165	65.	110	1.5	..	A few Ci cu.
	20	15.	766.10	30.086	59.5	30.160	30.077	25.	27.	23.5	.111	68.	125	..	..	Clear.
	21	13.5	766.60	30.114	56.7	30.179	30.104	24.3	26.5	23.5	.117	68.	125	.3	..	Clear.
	22	13.7	767.60	30.162	51.8	30.224	30.161	..	25.	23.5	.132	63.6	125	1.5	..	Clear.
23	..	..	..	..	..	..	..	..	..	..	..	..	125	.8	..	Clear.

Observed dew point: 9h., 16°.6.

January.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1942.]

[79]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
24	0	776.85	30.530	49.5	30.576	30.519	...	17.2	16.6	.108	69.4	230	...	...	...	Clear.
	1	777.00	30.536	49.4	30.578	30.521	...	17.	15.2	.090	69.	253	...	...	...	Clear.
	2	777.65	30.555	50.2	30.612	30.553	14.2	16.1	14.3	.087	69.9	246	...	...	...	Clear.
	3	778.05	30.563	53.	30.626	30.559	13.	15.5	13.7	.084	69.9	253	...	...	...	Clear.
	4	778.05	30.567	53.5	30.624	30.556	12.	16.	13.2	.083	69.9	254	...	...	...	Clear.
	5	778.10	30.565	53.9	30.628	30.556	10.	14.5	13.1	.086	70.	254	...	...	...	Clear.
	6	778.70	30.567	53.9	30.650	30.580	9.2	14.	12.5	.083	70.	254	...	...	...	Clear.
	7	778.95	30.593	56.	30.668	30.593	8.9	13.5	12.2	.084	70.	254	...	...	...	Clear.
	8	779.05	30.592	57.	30.680	30.602	...	13.6	12.9	.092	70.	254	...	...	...	Clear.
	9	779.65	30.610	59.	30.700	30.617	...	17.	14.8	.085	68.	254	...	...	...	Clear.
	10	779.60	30.611	59.2	30.693	30.610	58.	17.4	15.	.082	67.5	254	...	...	...	Clear.
	11	778.90	30.588	58.4	30.669	30.587	59.	19.	16.3	.085	67.3	254	...	...	...	Clear.
	12	778.20	30.560	60.	30.638	30.562	65.	20.7	18.	.092	67.	270	...	...	...	Clear.
	13	777.20	30.513	59.2	30.600	30.517	63.	22.7	19.2	.089	65.	5	...	...	...	Clear.
	14	776.75	30.496	60.	30.580	30.494	51.	24.4	20.7	.095	63.7	210	...	...	...	Clear.
	15	776.55	30.488	60.	30.572	30.486	47.	25.2	21.8	.103	65.	190	...	...	...	Clear.
	16	776.00	30.466	60.	30.556	30.470	...	25.5	21.9	.102	64.7	...	...	...	...	Clear, hazy Hor.
	17	775.60	30.456	59.2	30.520	30.437	...	24.	21.4	.109	67.9	...	...	...	...	S. at W.
	18	775.45	30.458	57.2	30.500	30.422	...	23.5	21.	.108	69.	...	...	...	...	Clear, hazy Hor.
	19	774.75	30.436	55.	30.476	30.404	...	22.5	20.6	.112	72.	...	...	...	...	S. at W.
	20	774.15	30.418	52.9	30.450	30.383	20.	21.4	20.4	.121	73.	...	...	...	...	Clear, hazy Hor.
	21	774.05	30.419	51.	30.450	30.389	19.	22.	20.5	.117	74.2	...	...	...	...	S. at W.
	22	773.50	30.398	49.8	30.450	30.391	...	21.2	20.	.117	75.9	...	...	...	...	S. at W.
	23	772.15	30.336	51.	30.400	30.339	...	21.	19.6	.113	78.	...	...	...	...	S. at W.

Observed dew point: 3h., 8° 6; 9h., 8° 5.

998

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

JANUARY.]

Date.	Hour.	Barometer No. 1.		Barometer No. 2.		Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.			Dir., degrees.	Force, lbs.			
25	0	12.1	771.60	30.315	52.	30.372	30.308	18.	.116	92.	..	.2	..	.3	Ci-cu., Ci-s, (1) N., (2) NW., S., Ci-a.
	1	12.1	771.85	30.325	52.	30.376	30.312	16.	.114	82.3	..	..	..	.4	S., Ci-a.
	2	13.3	771.50	30.306	53.2	30.370	30.308	..	.122	82.3	..	..	..	1.0	S.
	3	14.	770.25	30.254	56.	30.318	30.243	..	.029	84.	..	.3	..	1.0	S.
	4	12.8	769.65	30.237	55.7	30.289	30.206	..	.132	85.	..	.4	..	1.0	S.
	5	12.5	768.95	30.212	54.8	30.289	30.208	..	.134	85.	..	.2	..	1.0	S.
	6	12.3	768.45	30.193	54.	30.298	30.229	..	.142	85.3	..	..	..	1.0	S.
	7	14.5	768.55	30.186	55.4	30.250	30.178	..	.145	85.9	..	.2	..	1.0	S., Ci-s.
	8	13.5	768.40	30.184	55.7	30.216	30.135	..	.164	85.5	..	.6	..	1.0	Ci-a.
	9	9.5	767.00	30.148	52.6	30.200	30.137	..	.149	86.	..	..	..	.5	Ci-cu., Ci-a.
	10	10.8	766.85	30.137	51.5	30.200	30.134	..	.151	81.5	..	.13	..	.5	Ci-s, Ci-cu.
	11	13.4	766.50	30.110	53.5	30.180	30.113	..	.162	78.	..	1.0	..	.4	Ci-cu., Ci.
	12	13.	765.00	30.052	56.	30.136	30.056	..	.152	74.	30	1.4	..	.6	Ci., Ci-cu., Ci-a.
	13	15.5	764.55	30.022	57.	30.110	30.034	..	.153	73.7	30	1.2	..	.9	Ci., Ci-cu., Ci-a.
	14	17.	763.80	29.986	59.5	30.080	29.997	..	.147	71.	20	.8	..	1.0	Ci-a.
	15	17.	764.00	29.994	60.4	30.083	29.997	..	.155	72.3	30	.3	..	1.0	Ci-a.
	16	15.	763.70	29.991	59.7	30.074	29.990	..	.153	73.	30	1.0	..	1.0	Ci-s, N.
	17	16.	763.40	29.975	59.5	30.030	29.947	..	.180	87.	30	2.0	..	1.0	N., snowing.
	18	16.6	762.90	29.952	60.2	30.008	29.923	..	.181	90.	30	1.3	..	1.0	Ci-s, N.
	19	16.	762.35	29.933	60.2	29.978	29.893	..	.184	90.	30	.3	..	1.0	Ci-s, N.
	20	16.6	762.00	29.917	60.2	29.970	29.885	..	.179	90.	30	.2	..	1.0	Ci-s, N.
	21	17.2	761.90	29.910	61.	29.966	29.879	..	.177	87.	41	.1	..	1.0	Ci-s, N.
	22	17.4	762.00	29.912	61.6	29.994	29.906	..	.180	87.	21	.1	..	.8	Ci-s, N., halo.
	23	17.3	761.40	29.890	61.8	29.962	29.872	..	.179	87.1	21	1.0	Slight S., Ci-s, halo.

January.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

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Day.	Hour.	Barometer No. 1.		Barometer No. 2.		Thermometers, Fah.		Force of vapor, ins.	Hygr., measure.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strat.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.			Radiation.	Dry.	Wet.		
26	0	18.4	761.35	29.893	62.6	29.958	29.867	31.1	29.7	170	86.9	21	.8	Cl-cu., (1) SW., (2) W.
	1	19.8	760.70	29.852	64.6	29.946	29.850	31.	29.9	174	85.	21	.3	Cl-cu., Cl-s.
	2	20.3	760.75	29.851	66.1	29.938	29.837	29.6	28.4	163	85.5	21	.2	Cl., Cl-s., (1) W., (2) SW.
	3	18.5	760.85	29.863	65.	29.934	29.836	27.	26.1	160	87.	21	.7	S.
	4	18.2	760.60	29.854	64.2	29.932	29.837	27.5	27.	162	88.2	21	.	Clear.
	5	17.6	760.80	29.866	63.8	29.950	29.855	27.7	27.2	163	89.4	21	.3	S., Cl-s.
	6	17.	760.30	29.849	62.	29.928	29.838	27.5	26.4	153	90.5	21	1.0	Foggy.
	7	16.5	760.40	29.856	60.2	29.918	29.833	27.5	26.5	154	91.	21	.2	Cu. at Hor.
	8	17.2	760.70	29.863	60.8	29.940	29.853	27.7	27.2	163	89.3	21	.2	S., Cu. at Hor.
	9	17.	760.10	29.841	60.5	29.934	29.848	32.6	31.1	178	87.	20	.1	Cl., S. at Hor
	10	17.8	760.00	29.833	61.	29.929	29.841	34.4	32.7	186	86.	20	.1	Cl., S.
	11	19.1	759.60	29.811	63.	29.910	29.817	36.8	34.6	194	85.	0	.6	Cl., Cl-s., S., W by S.
	12	19.3	758.10	29.751	64.2	29.853	29.758	39.8	36.5	197	80.3	10	.8	Light Cl., Cl-s., WSW.
	13	20.	756.80	29.696	64.8	29.805	29.708	43.5	39.	205	74.5	10	.8	Light Cl., Cl-s., WSW.
	14	21.2	755.91	29.656	67.	29.760	29.657	44.6	39.2	197	70.3	45	.9	Light Cl., Cl-s., WSW.
	15	21.1	755.65	29.646	67.8	29.757	29.652	43.7	38.4	191	71.	25	1.0	Light Cl., Cl-s., WSW.
	16	21.	755.20	29.628	68.	29.734	29.629	43.	38.6	203	73.7	25	1.0	Cl., Cl-s., Cl-cu., WSW.
	17	20.7	754.40	29.600	67.9	29.666	29.561	39.5	36.5	200	71.2	25	1.0	Cl., Cl-s., Cl-cu., WSW.
	18	21.	753.75	29.572	67.5	29.650	29.547	38.5	34.9	181	78.3	25	.8	Cl-cu., WSW.
	19	21.7	751.30	29.591	68.	29.672	29.568	37.4	35.4	203	80.	24	1.0	Cl-cu., Cl-s., WSW.
	20	23.	753.00	29.533	71.3	29.620	29.509	37.	35.	200	81.5	25	1.0	Cl-cu., Cl-s., WSW.
	21	21.7	752.40	29.516	70.5	29.596	29.486	35.9	34.	193	84.	25	.6	Cl-cu.
	22	21.	752.00	29.504	69.2	29.592	29.485	35.7	34.1	197	85.	24	.9	Cl-cu., Cl-s., WSW.
	23	20.	751.05	29.489	68.3	29.592	29.487	35.6	34.8	211	87.	22	1.0	Cl-cu., Cl-s., WSW.

Observed dew point: 34., 38°, 94., 27° 8.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gausses's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
27	0 19.2	751.00	29.473	66.	29.550	29.451	...	35.5	34.5	.207	89.1	21	...	...	1.0	S, Ci-cu.
	1 18.4	750.35	29.452	64.2	29.535	29.441	...	36.	34.8	.207	92.2	40	...	...	1.0	N, raining.
	2 19.8	750.70	29.459	65.	29.546	27.450	...	34.4	33.6	.202	93.	21	...	...	.4	Cu, Ci-cu., N., (1) SHW., (2) W.
	3 19.9	750.90	29.466	65.3	29.540	29.413	...	34.9	34.2	.207	88.4	34	...	...	.5	Ci-cu., N.
	4 20.8	751.20	29.473	66.9	29.575	29.473	...	35.8	35.4	.219	83.6	59	2	...	.7	Ci-cu.
	5 21.6	752.25	29.511	68.3	29.591	29.489	...	37.9	36.7	.222	84.	33	2.5	...	.8	Ci-cu.
	6 22.	752.95	29.538	69.8	29.622	29.513	...	39.	37.8	.232	77.	92	2.7	...	1.0	Ci-cu., WSW.
	7 20.5	754.00	29.585	68.8	29.672	29.565	...	37.5	34.5	.185	77.5	98	4.5	...	.8	Ci-cu., WSW.
	8 19.6	756.15	29.672	67.	29.743	29.640	...	36.	34.5	.202	70.5	105	7.0	...	.7	Ci-cu., SW.
	9 18.	757.65	29.741	66.	29.840	29.742	...	34.	28.3	.118	65.5	120	10.0	...	.2	Cu, NW.
	10 17.	759.50	29.817	63.	29.906	29.813	...	33.	27.2	.110	64.	120	12.0	...	.3	Cu, NW.
	11 16.2	760.50	29.861	61.2	29.946	29.859	...	34.	27.5	.104	60.	120	7.0	...	.4	Cu, NW.
	12 16.	760.80	29.873	60.	29.956	29.871	...	34.3	28.	.109	60.	120	7.0	...	.5	Cu, NW.
	13 17.7	761.60	29.896	61.	29.988	29.901	...	35.	28.5	.110	59.5	120	7.0	...	.4	Cu, NW.
	14 18.	762.45	29.928	62.2	30.020	29.930	...	35.5	28.5	.105	57.	120	5.0	...	.3	Cu, NW.
	15 18.	763.00	29.958	62.8	30.021	29.930	...	36.7	29.4	.108	56.5	110	5	...	.3	Cu, NW.
	16 18.	765.00	30.028	62.8	30.114	30.021	...	36.	28.5	.100	55.3	110	4.0	...	.6	Cu, NW.
	17 16.9	766.50	30.094	61.6	30.168	30.080	...	34.5	28.	.123	57.	100	3.0	...	.9	Cu, NW.
	18 16.	767.00	30.116	60.5	30.174	30.088	...	33.8	28.4	.120	57.	120	2.5	...	1.0	Cu, NW.
	19 15.	768.15	30.167	58.7	30.224	30.142	...	33.5	28.5	.138	58.8	720	1.5	...	1.0	Cu, NW.
	20 15.6	768.75	30.188	57.8	30.249	30.169	...	33.5	29.5	.141	59.3	120	...	...	1.0	Cu, NW.
	21 16.2	769.15	30.201	58.7	30.260	30.178	...	33.	29.5	.146	61.7	120	...	...	1.0	Cu, NW.
	22 16.4	769.70	30.220	59.2	30.296	30.213	...	32.4	29.3	.150	64.5	92	...	...	1.0	Cu, Ci-cu., NW.
	23 16.2	770.45	30.251	59.4	30.326	30.242	...	31.	27.2	.129	66.	86	...	...	.1	Ci-cu., NW.

Observed dew point: 9h., 17°.

Date.	Barometer No. 1.				Barometer No. 2.				Thermometers, Fah.			Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Force, lbs.	Dir., degrees.						
28	0 17.3	770.65	30.252	60.6	30.330	30.243	....	30.1	26.4	....	110	66.8	....	....	....	....	Clear.
1	1 17.9	771.45	30.282	61.8	30.348	30.257	....	29.	24.8	....	96	67.5	....	....	....	....	Clear.
2	2 18.5	772.30	30.310	63.5	30.368	30.293	....	27.9	24.2	....	94	70.	....	....	....	....	Clear.
3	3 17.8	772.00	30.305	63.	30.370	30.276	....	26.5	25.5	....	93	70.	....	....	....	....	Clear.
4	4 16.4	772.10	30.314	60.3	30.372	30.285	27.	25.8	25.	....	94	75.	....	....	....	....	Clear.
5	5 16.5	772.40	30.326	60.3	30.400	30.313	20.	25.5	24.	....	94	78	....	....	....	....	Clear.
6	6 17.4	773.00	30.346	61.	30.400	30.311	16.7	23.2	23.	....	94	83.5	....	....	....	....	Cl's at Hor.
7	7 17.5	773.15	30.352	61.7	30.412	30.322	17.	22.3	21.4	....	94	85.	....	....	....	....	S., Cu.
8	8 16.7	772.95	30.347	61.	30.412	30.323	....	23.8	23.5	....	94	85.	....	....	....	....	S.
9	9 16.5	772.85	30.344	60.	30.428	30.342	....	29.	27.4	....	45	82.	....	....	....	....	Cl's in SW.
10	10 17.	772.50	30.328	60.	30.415	30.329	59.5	33.	30.	....	20	80.3	....	....	....	....	Cl's in S.
11	11 17.1	772.10	30.312	60.9	30.390	30.301	68.5	37.1	31.6	....	20	72.3	....	....	....	....	Cl. in S.
12	12 17.2	770.80	30.259	61.2	30.353	30.264	64.	38.7	32.7	....	20	68.	....	....	....	....	Cl. in S.
13	13 17.3	769.75	30.218	61.8	30.310	30.219	55.5	40.2	33.7	....	20	65.5	....	....	....	....	Cl. in S.
14	14 18.8	768.95	30.175	63.2	30.266	30.172	55.5	41.6	34.7	....	10	65.	....	....	....	....	Cl. in S.
15	15 18.5	768.25	30.152	63.7	30.242	30.147	55.	42.5	35.5	....	0	65.	....	....	....	....	Cl. in S.
16	16 18.	767.85	30.141	63.4	30.203	30.108	....	42.4	36.	....	0	66.2	....	....	....	....	Cl., scattered.
17	17 18.	767.45	30.125	63.9	30.206	30.110	....	38.	35.	....	350	70.	....	....	....	....	Clear.
18	18 17.9	767.20	30.115	63.4	30.190	30.095	....	38.	35.	....	350	74.2	....	....	....	....	Clear.
19	19 17.5	766.80	30.101	62.8	30.180	30.086	....	35.5	33.4	....	350	78.	....	....	....	....	Clear.
20	20 17.	766.50	30.092	61.2	30.163	30.076	31.	34.5	32.5	....	25	83.	....	....	....	....	Clear.
21	21 17.8	766.10	30.072	62.6	30.143	30.050	31.5	34.5	32.5	....	0	84.	....	....	....	....	Clear.
22	22 17.	764.75	30.024	59.6	30.102	30.019	33.5	35.	32.5	....	0	82.	....	....	....	....	Clear.
23	23 17.	764.50	30.014	60.	30.088	30.003	33.2	35.5	33.	....	355	83.	....	....	....	....	Clear.

Observed dew point: 9h., 20° 6.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hygr., Sauswre's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.		Dir., degrees.	Force, lbs.			
29	18.2	764.00	29.987	61.9	30.061	29.971	32.	35.3	.190	..	1	..	..	A few Ci. and Ci-s.
1	18.2	763.75	29.977	63.	30.048	29.954	33.5	35.5	.200	24	..	..	..	Clear.
2	18.2	763.35	29.960	63.	30.040	29.946	..	35.2	.200	24	..	..	.8	Ci cu.
3	17.6	762.45	29.930	62.5	30.020	29.929	..	36.4	.209	24	..	..	.6	Ci-cu.
4	17.	762.50	29.935	62.	30.000	29.910	..	37.6	.230	24	..	..	1.0	Ci-cu., S.
5	16.	761.15	29.886	60.5	29.986	29.900	..	40.4	.239	24	..	..	1.0	Cu.
6	15.3	761.85	29.918	60.	29.986	29.901	..	41.7	.255	24	..	..	1.0	Cu.
7	14.6	761.60	29.911	58.8	29.974	29.892	..	42.	.256	24	..	..	1.0	Ci-cu., Cu.
8	14.	761.60	29.914	57.3	29.982	29.885	..	42.8	.264	35	..	..	.9	Ci-cu.
9	14.	761.40	29.907	56.	29.980	29.906	..	45.1	.263	40	..	..	.8	Ci, Ci-cu.
10	16.	761.40	29.897	57.5	29.980	29.903	..	46.	.304	86	..	..	.8	Cu., Ci., Ci-cu.
11	18.	760.80	29.864	61.	29.957	29.870	..	49.9	.309	45	2.0	..	.9	Cu., Ci., Ci-cu.
12	19.3	759.50	29.806	64.1	29.910	29.815	..	52.5	.322	84	1.2	..	.9	Cu., Ci., Ci-cu.
13	20.4	759.35	29.783	65.5	29.890	29.791	..	53.8	.320	83	2.0	..	.9	Cu., Ci., Ci-cu.
14	21.5	758.40	29.753	67.8	29.865	29.760	..	54.2	.343	84	30	..	.4	Cu., Ci., Ci-cu.
15	21.9	758.35	29.740	69.	29.844	29.735	..	53.5	.351	87	1.0	..	1.0	Cu.
16	22.2	758.15	29.738	70.1	29.844	29.733	..	53.	.346	86.3	.5	..	1.0	Cu., Ci-s.
17	22.7	758.00	29.730	70.7	29.832	29.720	..	51.	.346	90	..	..	1.0	Cu., Ci-s.
18	22.2	757.40	29.709	70.6	29.784	29.672	..	49.7	.336	60	..	..	1.0	Cu., Ci-s.
19	22.2	757.10	29.697	70.3	29.762	29.671	..	49.5	.334	30	..	..	1.0	N., ? Cu., Ci-s.
20	21.9	755.80	29.648	70.	29.740	29.630	..	49.	.338	30	..	..	1.0	N., ? Cu., Ci-s.
21	22.2	754.80	29.608	70.1	29.682	29.572	..	48.9	.341	10	..	..	1.0	N., ? Cu., Ci-s.
22	21.8	754.05	29.582	69.7	29.662	29.554	..	50.	.350	94	..	..	1.0	N., ? Cu., Ci-s.
23	..	..	..	..	..	..	..	..	..	10	..	..	..	..

Observed dew point: 9h., 41° 8; 15h., 48°.

JANUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

874

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.						
31	0	18.1	762.75	29.940	63.8	30.004	29.969	...	36.4	34.5	.196	25	2.0	..	.6	Ci-cu., Ci-s.
	1	17.8	762.65	29.937	62.9	30.004	29.921	...	38.2	34.6	.178	342	..	..	.5	Ci-cu., Ci-s.
	2	18.5	762.25	29.917	63.	30.000	29.907	...	38.6	34.8	.177	339	..	..	.2	Ci-cu., Ci-s.
	3	19.7	762.00	29.902	65.4	29.948	29.849	...	39.7	35.9	.186	339	..	..	.6	Ci-cu.
	4	20.9	761.95	29.895	67.8	29.940	29.834	...	41.9	39.8	.222	23	..	..	.6	Ci-cu., S.
	5	20.3	761.25	29.826	66.4	29.900	29.798	...	43.3	41.2	.252	16	..	..	.4	Slight fog.
	6	22.4	759.05	29.772	69.9	29.836	29.729	...	44.2	42.	.258	13	..	..	.8	Slight fog.
	7	22.6	759.55	29.791	71.8	29.848	29.733	...	45.	42.5	.260	13	..	..	1.0	Thick fog.
	8	22.8	759.15	29.736	70.2	29.838	29.731	...	47.	43.2	.252	0	..	..	1.0	Ci-s., Ci-cu., SW.
	9	22.	757.50	29.715	71.6	29.828	29.711	...	48.6	46.4	.305	10	..	..	1.0	Ci-s., Ci-cu.
	10	20.5	756.70	29.689	69.6	29.790	29.680	...	52.3	49.3	.331	10	..	..	1.0	Ci-s., Ci-cu., Cu.
	11	20.2	756.00	29.663	68.2	29.770	29.664	...	51.6	49.8	.351	20	1.2	..	1.0	N., Cu.
	12	20.2	755.35	29.638	68.4	29.743	29.636	...	51.2	50.	.360	20	.8	..	1.0	N., showery.
	13	20.4	754.60	29.608	68.2	29.708	29.602	...	52.	51.	.375	25	1.5	..	1.0	N., showery.
	14	21.6	763.00	29.540	69.	29.654	29.545	...	53.	52.	.389	25	1.0	..	1.0	N., showery.
	15	22.5	752.60	29.521	70.8	29.632	29.520	...	55.1	53.6	.406	25	.9	..	1.0	N., showery.
	16	22.8	752.60	29.520	71.5	29.632	29.519	...	56.3	54.3	.410	30	1.2	..	1.0	N., Cu.
	17	22.2	753.00	29.537	71.5	29.650	29.537	...	55.5	53.8	.406	30	2.0	..	1.0	N., Cu.
	18	22.2	753.50	29.557	71.5	29.668	29.555	...	55.	53.5	.405	30	1.0	..	1.0	N., Cu.
	19	22.	753.75	29.569	70.9	29.674	29.562	...	54.3	53.2	.404	30	.5	..	1.0	N., showery.
	20	21.7	755.00	29.619	70.3	29.716	29.606	...	50.7	48.	.319	130	1.0	..	1.0	N., showery.
	21	20.9	755.70	29.650	69.3	29.748	29.640	...	49.2	44.7	.263	135	2.5	..	1.0	N., showery.
	22	20.	756.40	29.661	67.8	29.774	29.670	...	45.5	39.5	.193	120	3.5	..	1.0	N., showery.
	23	21.	756.50	29.769	68.	29.860	29.760	...	42.5	37.	.176	130	2.8	..	..	Clear.

Observed dew point: 9h., 44°; 15h., 53°; 5, 21h. 45°.

FEBRUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1942.]

Date.	Barometer No. 1.				Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Dir., degrees.			Force, lbs.				
1	0	21.2	758.80	29.770	68.7	29.870	29.763	39.	40.	35.	.166	71.	130	2.2	..	..	Clear.
	1	21.	759.40	29.794	68.5	29.892	29.785	37.7	38.5	33.5	.154	69.5	130	4.7	..	..	Clear.
	2	20.7	760.30	29.831	68.5	29.920	29.813	...	37.	32.	.143	68.	130	2.0	..	.2	A few Ci. at Hor.
	3	20.4	761.15	29.866	67.8	29.961	29.858	...	35.7	31.4	.152	70.5	120	1.5	..	..	Clear.
	4	19.8	761.85	29.897	67.	29.992	29.889	32.	35.	32.6	.177	71.	110	.3	..	..	Clear.
	5	19.3	763.10	29.917	65.8	30.016	29.935	32.2	35.	31.5	.161	71.	120	..	..	..	Clear.
	6	19.	764.35	29.936	65.3	30.088	29.989	32.	34.3	32.	.173	69.	122	.4	..	..	Clear.
	7	18.4	765.60	30.050	64.3	30.132	30.036	...	34.	29.8	.142	68.8	115	.1	..	..	Clear.
	8	18.8	765.65	30.089	64.3	30.176	30.080	...	34.4	30.	.141	68.	101	..	..	..	Clear.
	9	19.6	767.55	30.121	65.	30.212	30.114	...	36.7	31.4	.141	64.6	110	..	..	..	Clear.
	10	19.3	768.20	30.149	65.	30.234	30.136	59.2	38.2	31.5	.128	63.	112	1.0	..	..	Clear.
	11	19.2	768.70	30.168	64.8	30.258	30.158	67.3	39.5	32.7	.127	60.	89	1.3	..	..	Clear.
	12	19.	768.00	30.141	64.4	30.244	30.146	67.	40.2	33.5	.194	61.5	90	.6	..	..	Clear.
	13	18.5	767.75	30.133	63.4	30.220	30.125	70.5	41.4	34.2	.133	61.5	120	1.0	..	..	Clear.
	14	18.5	768.10	30.147	63.4	30.242	30.147	64.	41.8	34.8	.140	59.	110	2.0	..	..	Clear.
	15	18.1	768.45	30.163	63.	30.259	30.164	68.	42.2	34.5	.130	59.	110	2.3	..	..	Ci. in S.
	16	18.	768.85	30.179	62.6	30.275	30.183	60.	41.7	34.	.126	58.	116	2.0	..	..	A few Ci.
	17	18.1	769.70	30.212	62.4	30.300	30.208	...	43.	34.5	.155	59.3	270	1.2	..	..	A few S.
	18	17.	770.45	30.217	62.7	30.325	30.232	...	...	...	...	61.3	80	..	..	..	Clear.
	19	18.4	770.75	30.251	62.8	30.350	30.257	...	36.2	31.5	.146	63.	83	..	..	..	Clear.
	20	17.5	771.00	30.266	62.5	30.350	30.253	...	34.	31.5	.171	70.	40	..	..	..	Clear.
	21	18.7	771.40	30.276	63.	30.366	30.272	...	33.5	30.7	.162	72.5	4	..	..	..	Clear.
	22	18.2	771.60	30.285	63.	30.373	30.279	25.	31.	28.8	.156	76.	5	..	..	..	Clear.
23	16.2	771.45	30.290	61.8	30.370	30.280	23.	31.1	26.9	.157	77.	5	..	..	..	Clear.	

Observed dew point: 8h., 25°; 9h., 17°; 8, 15h., 20°; 2.

FEBRUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

876

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gausse's.	Wind.		Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.		
2	16.4	771.45	30.289	60.5	30.364	30.277	22.1	29.4	28.3	.164	93.5	9	...	Clear.
1	16.6	771.60	30.294	60.2	30.372	30.286	24.2	28.7	27.7	.161	95.5	9	...	Clear.
2	16.5	771.70	30.299	60.2	30.380	30.294	22	28.3	27.2	.157	87.	0	...	Clear.
3	16.8	*771.95	30.347	60.2	30.382	30.296	21.3	27.7	27.	.159	86.	5	...	Clear.
4	19.	†771.90	30.294	62.4	30.386	30.294	...	27.8	26.8	.154	85.2	5	...	Clear.
5	18.8	771.75	30.289	61.	30.380	30.283	21.	28.	27.	.156	86.	5	...	Clear.
6	17.8	771.80	30.296	63.4	30.380	30.285	...	27.5	26.2	.148	90.	0	...	Clear.
7	17.	772.10	30.312	62.	30.390	30.299	...	25.7	25.	.147	90.	0	...	Clear.
8	19.3	772.00	30.296	62.8	30.390	30.296	...	31.5	30.1	.170	88.	10	...	Clear.
9	20.3	772.20	30.299	65.5	30.405	30.304	68.	33.7	31.7	.177	84.7	10	...	Clear.
10	20.2	771.90	30.288	66.5	30.392	30.289	72.	36.3	33.8	.184	83.	15	...	Clear.
11	19.2	771.00	30.528	66.2	30.358	30.256	76.5	43.2	37.7	.181	72.	10	...	Clear.
12	18.8	769.80	30.213	65.3	30.312	30.213	63.	45.1	38.5	.176	66.5	10	...	Clear.
13	19.8	768.70	30.166	64.5	30.270	30.174	66.5	46.2	40.	.193	68.	10	...	Clear.
14	21.1	767.80	30.123	66.5	30.233	30.131	59.	48.2	40.6	.183	65.	20	...	Clear.
15	21.7	767.00	30.089	68.4	30.200	30.093	62.5	49.2	40.7	.174	62.	10	...	Clear.
16	21.7	767.00	30.089	68.9	30.200	30.091	...	49.5	41.4	.186	62.3	10	...	Clear.
17	21.2	766.90	30.089	69.	30.192	30.083	...	48.	41.7	.209	67.3	25	...	Clear.
18	20.5	766.60	30.079	68.	30.170	30.064	...	44.5	41.3	.241	77.5	0	...	Clear.
19	20.1	766.70	30.086	67.4	30.173	30.069	...	44.	41.5	.251	84.	0	...	Clear.
20	21.	766.65	30.070	67.5	30.168	30.064	...	42.4	40.3	.243	87.2	350	...	Clear.
21	21.6	766.20	30.058	68.2	30.150	30.044	...	41.7	39.8	.241	89.	0	...	Clear.
22	21.7	765.55	30.032	68.6	30.132	30.025	...	43.	41.5	.261	89.2	355	...	Clear.
23	21.1	766.30	30.025	68.7	30.130	30.022	...	43.7	42.2	.268	89.	355	...	Clear.

* Registered 772.95.

† Registered 772.90.

Observed dew point: 3h., 21° 5; 9h., 27° 6; 15h., 26° 5; 21h., 38°.

Slight sprinkling of rain.

FEBRUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.				Barometer No. 2.			Thermometers, Fah.			Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Force of vapor, ins.		Dir., degrees.	Force, lbs.			
3	0	764.05	29.972	69.4	30.072	29.962	...	45.	43.5	.282	90.	355	...	...	1.0	?
	1	763.45	29.948	69.6	30.046	29.936	...	45.4	44.	.288	89.6	353	...	...	1.0	?
	2	762.85	29.920	70.8	30.018	29.904	...	45.7	44.3	.291	90.	355	...	...	1.0	Very slight sprinkling.
	3	761.85	29.879	71.4	29.988	29.873	...	47.	46.	.315	92.	357	...	...	1.0	N.
	4	760.90	29.837	73.2	29.948	29.829	...	54.	52.	.378	92.	10	...	...	1.0	N., slight rain.
	5	760.40	29.821	73.7	29.932	29.812	...	53.5	52.5	.396	92.	5	...	...	1.0	N., slight rain.
	6	759.90	29.805	73.	29.908	29.789	...	53.5	53.	.409	91.	7	...	...	1.0	N., raining.
	7	759.80	29.801	72.2	29.908	29.791	...	54.2	53.	.401	92.2	21	...	...	1.0	N., raining.
	8	759.85	29.800	74.	29.912	29.790	...	55.6	54.5	.422	92.	12	...	...	1.0	Cl., N.
	9	759.45	29.776	75.	29.900	29.775	...	57.5	55.5	.429	90.5	10	2.0	.07	1.0	N., broken, SW.
	10	758.80	29.755	75.2	29.877	29.752	...	58.5	57.	.456	91.	10	3.8	...	1.0	N., broken, SW.
	11	757.70	29.715	74.2	29.836	29.713	...	61.	58.5	.470	89.	10	2.4	...	1.0	N., broken, SW.
	12	756.90	29.684	73.5	29.800	29.680	...	63.	60.	.490	88.	30	1.8	...	1.0	N., broken, SW.
	13	756.40	29.666	73.	29.780	29.661	...	64.2	61.2	.511	87.	30	3.1	...	1.0	N., broken, SW.
	14	756.30	29.662	73.	29.774	29.655	...	64.7	61.5	.516	86.	30	3.1	...	1.0	N., broken, SW.
	15	756.15	29.656	73.	29.765	29.646	...	64.5	61.7	.523	88.8	20	2.5	...	1.0	N., broken, SW.
	16	756.15	29.656	73.	29.765	29.646	...	63.	61.	.519	89.5	10	3.0	...	1.0	N., broken, SW.
	17	756.15	29.656	73.	29.765	29.646	...	63.	61.	.519	89.5	10	3.0	...	1.0	N., broken, SW.
	18	756.10	29.655	72.5	29.763	29.645	...	61.5	60.	.506	90.	355	1.5	...	1.0	N., broken, SW.
	19	756.10	29.655	72.	29.763	29.645	...	60.8	59.	.486	91.1	350	.3	...	1.0	A few Cu. at Hor.
	20	756.00	29.647	72.2	29.758	29.641	...	59.9	58.	.478	91.3	24	1.5	...	...	A few Cu., Cl-a.
	21	755.90	29.637	74.	29.754	29.632	...	60.6	59.3	.496	91.5	0	.4	...	...	A few Cu.
	22	755.85	29.631	75.4	29.746	29.623	...	60.	58.7	.486	91.5	360	.8	...	.3	A few Cu.
	23	755.25	29.610	76.3	29.728	29.601	...	61.1	59.8	.505	92.7	0	1.3	...	1.0	Not distinguishable, dark.

Observed dew point: 9h., 54°.5; 21h., 59°.5.

FEBRUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

878

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.	
	Temperature, centigrade.	Obsd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obsd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.				
Day. 4	0	25.5	755.80	29.631	76.8	29.708	29.579	...	60.9	59.5	.499	92.3	360	2.5	..	.7	? Dark.
	1	25.4	754.00	29.562	76.9	29.678	29.550	...	60.7	59.4	.499	92.3	355	1.5	..	.8	Cu., ? dark.
	2	25.3	753.80	29.555	76.8	29.666	29.537	...	61.8	60.1	.506	91.3	360	1.3	..	1.0	Cu., ? very dark.
	3	25.7	753.25	29.532	76.7	29.634	29.508	...	63.5	61.5	.428	90.5	0	1.2	..	1.0	Cu., ? very dark.
	4	27.	752.25	29.486	78.	29.586	29.456	...	60.	57.	.440	88.	0	2.7	..	1.0	N., slight drops of rain.
	5	26.6	753.50	29.537	78.6	29.638	29.507	...	65.2	61.5	.509	90.	90	5.7	..	1.0	N., raining.
	6	26.2	753.20	29.527	78.2	29.644	29.514	...	65.5	62.5	.535	87.	25	2.7	.02	1.0	N., slight showers, Cu.
	7	25.4	754.10	29.567	77.4	29.689	29.561	...	64.3	62.	.534	87.	30	3.7	..	1.0	Cu., broken, N., SW.
	8	26.7	754.60	29.586	77.2	29.706	29.578	...	64.4	61.9	.530	90.	30	.2	..	1.0	Cu., broken, N., SW.
	9	27.3	755.00	29.593	78.5	29.720	29.589	...	64.6	61.9	.527	87.3	20	.2	..	1.0	Cu., broken, N., SW.
	10	27.3	754.75	29.584	79.	29.710	29.577	...	64.6	61.6	.519	87.5	30	..	..	1.0	Cu., broken, N., SW.
	11	26.8	764.75	29.586	79.	29.710	29.577	...	64.9	62.	.527	88.7	20	.3	..	1.0	Cu., broken, N., SW.
	12	25.7	753.75	29.552	78.1	29.676	29.546	...	64.1	62.1	.539	89.	30	.6	..	1.0	Cu., broken, N., SW.
	13	25.	752.70	29.513	77.	29.630	29.502	...	65.	62.5	.541	90.	30	.3	..	1.0	Cu., broken, N., SW.
	14	24.5	752.00	29.488	76.	29.609	29.484	...	64.4	62.6	.550	91.	0	..	..	1.0	Cu., broken, N., SW.
	15	24.	751.40	29.466	75.	29.586	29.464	...	64.6	63.2	.567	91.5	350	..	..	1.0	Cu., broken, N., SW.
	16	23.9	751.00	29.450	74.5	29.567	29.446	...	65.	63.5	.572	92.	340	..	..	1.0	Cl., Cu., broken, Cu., SW.
	17	23.5	750.50	29.433	74.	29.522	29.403	...	63.9	62.5	.553	92.	335	..	..	1.0	Cl., Cu., broken, Cu., SW.
	18	23.2	750.25	29.424	73.5	29.513	29.395	...	63.5	62.5	.557	92.2	335	..	..	1.0	N., Cu., SW.
	19	23.	749.65	29.402	73.2	29.480	29.363	...	63.	62.	.548	92.5	330	..	..	1.0	N., Cu., SW.
	20	22.7	748.85	29.372	74.3	29.458	29.342	...	62.4	61.5	.540	92.5	3	..	..	1.0	N., Cu., SW.
	21	22.5	747.75	29.380	71.8	29.426	29.311	...	61.8	61.	.532	92.5	345	..	..	1.0	N., Cu., SW.
	22	22.	746.55	29.285	71.2	29.390	29.278	...	61.1	60.3	.519	92.3	350	.2	..	.2	Cu.
	23	21.7	746.10	29.268	70.7	29.372	29.261	...	60.7	59.6	.504	92.3	3	.6	..	.7	N., Cu.

Observed dew point: 3h., 59°; 9h., 61°; 15h., 62°; 6, 21h., 60°.

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

FEBRUARY.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temp., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
5	0	745.85	29.262	69.9	29.359	29.249	...	59.6	58.4	.493	20	.8	.2	...	Cl., Cu.
	1	745.15	29.235	69.1	29.328	29.221	...	59.5	57.5	.459	40	.1	.6	...	Cl., Cu.
	2	744.85	29.324	68.4	29.324	29.219	...	59.7	57.9	.468	40	.3	...	1.0	Raining quite hard.
	3	745.40	29.249	67.4	29.336	29.234	...	53.5	51.	.359	111	3.3	.13	1.0	N., no rain, very dark.
	4	745.50	29.255	67.	29.352	29.250	...	53.	50.2	.345	67	1.5	.01	1.0	N., no rain, very dark.
	5	745.70	29.265	66.	29.356	29.257	...	53.	50.5	.353	66	...	...	1.0	N., Cu., no rain.
	6	747.20	29.322	64.8	29.416	29.320	...	49.5	47.	.310	68	2.0	...	.4	N., SW.
	7	748.50	29.384	64.8	29.464	29.368	...	48.	45.2	.226	66.5	...	...	.6	Cu., S. by W.
	8	750.10	29.452	60.8	29.532	29.446	...	47.2	42.	.226	67.	...	...	.8	Cu., SSW.
	9	751.30	29.505	59.1	29.580	29.500	...	46.4	39.8	.190	67.3	...	...	1.0	Cu., broken, WNW.
	10	752.10	29.539	58.	29.614	29.536	64.	47.1	39.6	.178	64.5	...	...	.3	Cu., NW.
	11	753.60	29.598	57.2	29.672	29.597	...	47.2	39.5	.175	64.	...	...	.7	Cu., NW.
	12	755.10	29.657	56.8	29.728	29.653	...	48.5	40.5	.181	63.3	...	...	.8	Cu., NW.
	13	755.70	29.681	56.5	29.756	29.682	...	48.6	40.1	.171	62.	...	...	.7	Cu., NW.
	14	757.35	29.748	56.	29.814	29.740	...	47.6	39.8	.176	62.3	...	...	.9	Cu., NW.
	15	759.00	29.812	56.	29.880	29.806	...	46.8	39.3	.174	62.3	...	...	.3	Cu., NW.
	16	760.10	29.856	56.	29.930	29.856	...	46.	39.6	.169	62.7	...	...	...	A few scattered Cu.
	17	761.45	29.909	55.5	29.970	29.898	...	43.8	37.	.165	62.2	...	...	...	Clear.
	18	762.60	29.958	54.1	30.020	29.952	...	42.	36.	.163	64.	...	...	...	Clear.
	19	762.70	29.962	54.	30.028	29.960	...	41.5	35.5	.159	64.	...	...	...	Clear.
	20	763.85	30.011	52.8	30.066	30.001	...	38.	34.5	.179	68.	...	...	...	Clear.
	21	764.60	30.045	51.7	30.086	30.025	...	37.3	34.	.177	78.	...	...	...	Clear.
	22	765.00	30.063	50.8	30.103	30.043	...	37.	33.8	.177	72.8	...	...	...	Clear.
	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Observed dew point: 3h., 43°; 9h., 29°; 6, 15h., 26°.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
7	0	16.8	758.85	29.793	61.8	29.866	39.8	41.1	39.	.231	86.	15	..	..	1	Cu. at Hor.
	1	15.8	758.10	29.767	60.	29.833	40.	41.7	39.3	.231	85.	35	..	..	.3	S. at Hor.
	2	14.6	757.60	29.754	58.	29.824	39.	40.6	38.5	.227	85.4	35	..	..	.2	?
	3	13.2	756.50	29.716	55.8	29.778	39.3	39.9	38.	.225	86.3	37	..	..	.5	S., ? Cu.
	4	12.8	756.00	29.699	54.8	29.760	....	40.	38.5	.234	86.2	37	..	..	1.0	N., ? dark.
	5	12.2	755.60	29.687	53.7	29.750	....	39.5	38.2	.233	87.	37	..	..	1.0	N.
	6	11.5	755.20	29.675	52.2	29.730	....	40.3	38.8	.236	87.	37	..	..	1.0	S., ? N.
	7	11.5	755.00	29.667	52.	29.714	....	41.	39.5	.243	87.	37	..	..	1.0	S., ? N.
	8	11.8	754.55	29.648	51.5	29.706	....	42.5	40.5	.247	85.5	34	..	..	1.0	N.
	9	11.8	754.60	29.650	51.5	29.710	....	43.2	41.2	.254	86.	35	..	..	1.0	N., slight rain.
	10	12.	754.55	29.648	51.7	29.708	....	44.5	42.5	.268	87.3	48	..	..	1.0	N., slight rain.
	11	13.1	755.35	29.674	52.8	29.740	....	47.	44.4	.279	85.5	40	..	..	1.0	N., slight rain.
	12	16.	755.10	29.649	56.	29.730	....	47.	44.7	.285	87.	35	.8	..	1.0	N., raining, SW.
	13	18.4	753.40	29.572	60.	29.664	....	47.	45.3	.293	90.	35	1.2	..	1.0	N., raining, SW.
	14	19.8	752.30	29.522	64.	29.623	....	47.5	46.	.309	91.	60	..	.03	1.0	N., raining, SW.
	15	19.8	753.00	29.549	65.	29.645	....	46.	44.7	.296	90.5	50	.3	..	1.0	N., raining, SW.
	16	19.2	752.40	29.529	65.	29.627	....	45.7	45.	.306	91.5	70	..	.06	1.0	N., raining, SW.
	17	19.8	751.55	29.492	65.	29.582	....	46.4	45.1	.302	92.	50	..	..	1.0	N., raining, SW.
	18	21.2	751.85	29.498	66.8	29.586	....	46.	45.2	.308	92.	50	..	..	1.0	N., raining, SW.
	19	21.5	751.45	29.481	68.	29.572	....	45.8	45.	.305	92.	50	..	..	1.0	N., raining, SW.
	20	21.6	751.45	29.479	67.9	29.572	....	44.9	44.1	.296	92.	50	..	..	1.0	N., raining, SW.
	21	21.3	751.40	29.479	67.	29.562	....	45.	43.5	.282	90.8	140	.1	..	1.0	N., Cu., NW.
	22	20.7	751.80	29.498	67.	29.578	....	44.	42.3	.267	89.2	140	..	..	1.0	N., Cu.
	23	21.	751.85	29.498	67.8	29.592	....	43.	41.3	.258	87.	130	..	..	1.0	N., Cu.

Observed dew point: 3h., 33° 5; 9h., 39° 8; 15h., 43° 8.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Saunures's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
Day.	Hour.														
8	0	21.6	751.85	29.495	68.6	29.586		41.	.253	88.	130	..	..	1.0	N., Cu.?
	1	21.6	751.55	29.483	68.9	29.580	...	40.2	.231	86.	130	.2	..	1.0	N., Cu.
	2	22.4	751.65	29.483	69.7	29.584	...	37.5	.220	86.	110	..	..	.6	Cl., Cu.
	3	21.6	751.65	29.487	69.3	29.584	...	38.5	.211	83.8	143	..	..	.6	Cl., Cu., SW.
	4	21.9	751.75	29.490	69.4	29.592	...	38.	.189	83.	128	.7	..	.4	Cl., Cu., SW.
	5	21.3	752.25	29.513	69.2	29.606	...	36.	.151	74.	125	1.5	..	.4	Cl., Cu.
	6	21.3	752.50	29.523	68.8	29.622	...	34.7	.147	73.	109	.3	..	.8	Cl., Cu., S., SW.
	7	20.5	752.85	29.540	67.7	29.634	...	33.5	.136	73.5	70	.7	..	.7	Cl., SW.
	8	19.8	753.15	29.556	66.5	29.652	...	35.2	.167	75.5	66	.2	..	.1	Cl., SW.
	9	19.3	753.00	29.550	65.6	29.650	...	36.8	.166	74.	80	..	..	.1	Cl., Cu.
	10	20.4	753.05	29.518	66.	29.644	...	38.7	.156	70.2	70	.3	..	.6	Cl., Cu., W.
	11	21.	752.75	29.534	67.3	29.634	...	38.5	.151	67.	105	2.2	..	.7	Cl., Cu., (1) WNW., (2) SW.
	12	19.7	752.35	29.524	66.8	29.630	60.	34.7	.160	76.	130	2.5	..	.3	Cl., Cu., (1) WNW., (2) SW.
	13	19.	751.65	29.499	65.	29.592	...	37.8	.133	64.	100	2.8	..	.8	Cl., Cu., W.
	14	18.	751.85	29.512	64.	29.608	...	31.2	.136	72.	100	5.3	..	1.0	Cu., Cl., Ci. cu., Ci. a., W.
	15	18.1	752.80	29.550	63.	29.635	...	30.6	.099	62.	100	9.5	..	.9	Cu., Cl., Ci. cu., Ci. a., WSW.
	16	17.9	753.80	29.589	63.8	29.670	...	28.	.084	60.	100	9.8	..	1.0	Cu., Cl., Ci. cu., Ci. a.
	17	17.3	754.80	29.633	62.8	29.720	...	27.5	.084	60.	100	7.0	..	.9	Cu., N.
	18	17.6	756.35	29.690	62.5	29.780	...	26.	.077	61.	100	8.5	..	.4	Cu., Ci. cu.
	19	17.2	757.00	29.717	62.5	29.804	...	25.3	.076	62.	100	9.5	..	..	Clear.
	20	13.	759.00	29.816	58.	29.860	...	23.5	.084	60.	100	13.0	..	..	Clear.
	21	13.9	760.50	29.872	56.	29.864	23.1	23.	.065	59.2	100	7.5	..	..	Clear.
	22	12.9	762.00	29.934	55.7	29.927	20.	20.	.086	58.	100	9.0	..	..	Clear.
	23	11.5	763.20	29.989	52.3	29.977	18.8	19.	.086	57.2	100	10.0	..	..	Clear.

Observed dew point: 34., 31° 5; 94., 27° 3.

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.						
9	0	12	764.45	30.036	53	30.092	30.036	17	17.5	16.5	.104	100	8.5	..	..	Clear.
	1	11.8	765.30	30.069	52.7	30.120	30.056	16	16	15	.097	100	8.0	..	..	Clear.
	2	11.3	765.00	30.100	52	30.162	30.099	15	15	14.5	.100	100	8.0	..	..	Clear.
	3	10.8	766.20	30.111	51	30.169	30.109	14.5	14.5	14	.100	100	7.0	..	..	Clear.
	4	9.5	767.25	30.158	49.2	30.204	30.149	14	14	12	.076	100	4.0	..	..	Clear.
	5	9	767.50	30.169	48	30.216	30.164	13.9	13.9	11.5	.070	100	3.0	..	..	Clear.
	6	10	768.35	30.198	47.4	30.250	30.200	13	14	11.8	.073	110	1.2	..	..	Clear.
	7	10.2	769.10	30.227	47.9	30.274	30.232	...	14.5	12.5	.078	110	.2	..	..	Clear.
	8	11.4	769.60	30.244	49.8	30.294	30.238	...	16	14.5	.089	100	.2	..	..	A few Ci. a.
	9	12.2	770.00	30.251	51.2	30.316	30.255	41	18.7	15.8	.082	100	.2	..	..	Cu.
	10	13.8	769.85	30.240	53.5	30.314	30.216	42	20.5	17.5	.088	64	1.2	..	..	Cu.
	11	13.8	769.50	30.226	54.4	30.305	30.236	47	22.2	19	.093	63	1.3	..	..	A few small Cu.
	12	14.7	763.90	30.199	56	30.280	30.206	46.3	23.6	21.2	.111	63.5	2.2	..	..	Clear.
	13	14.7	767.85	30.157	56	30.240	30.166	45	26.2	21.7	.092	62.5	2.5	..	..	Ci., Ci-cu.
	14	15.2	767.00	30.120	57.7	30.208	30.129	47.5	27.5	22.7	.094	63	4.0	..	..	Ci.
	15	14.7	766.30	30.096	57.8	30.174	30.096	44	28.8	23.7	.096	62	4.5	..	..	Ci., Ci-cu.
	16	13.8	765.60	30.072	57	30.150	30.074	42	28.7	23.8	.098	62	4.0	..	..	Ci., Ci-cu. in E.
	17	14	765.35	30.062	56	30.131	30.060	...	28.5	24	.104	63.3	3.0	..	..	Ci-cu.
	18	13.6	764.80	30.042	56	30.100	30.038	...	27.5	24	.114	66.2	2.5	..	..	Clear.
	19	14.3	765.00	30.046	56.2	30.108	30.034	...	27.5	24.5	.122	68	.5	..	..	Clear.
	20	14.1	764.40	30.024	57.1	30.086	30.010	...	27	24	.119	70.1	10	..	..	Clear.
	21	13	763.25	29.983	55.5	30.040	29.968	27	27.5	24.5	.122	71	10	..	..	Clear.
	22	12.7	763.25	29.984	54.8	30.046	29.975	27	28.5	25	.119	71	30	..	..	Clear.
	23	13.3	763.20	29.979	55.1	30.042	29.971	27	28.5	25	.119	72.8	23	..	..	Clear.

FEBRUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Saunures.	Force of vapor, ins.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
10	0	14.9	763.15	29.969	56.2	30.044	29.970	26.4	28.4	25.3	.126	74.	25	.8	..	Clear.
	1	16.1	763.00	29.958	57.9	30.040	29.961	26.2	28.3	25.9	.136	75.	25	.2	..	Clear.
	2	18.	763.50	29.969	60.7	30.060	29.974	25.8	29.1	25.9	.128	74.5	36	.2	..	Clear.
	3	18.8	763.90	29.980	63.6	30.076	29.982	23.	27.5	25.	.130	75.	37	..	..	Clear.
	4	18.7	764.20	29.992	63.8	30.092	29.997	22.2	27.	25.3	.140	76.2	37	..	..	Clear.
	5	17.2	763.70	29.980	62.3	30.074	29.983	21.3	25.7	23.5	.125	79.5	37	..	..	Clear.
	6	18.4	764.00	29.987	62.2	30.074	29.984	22.2	27.	25.	.135	82.2	37	..	.4	A few Cu. and Ci. s.
	7	17.2	764.55	30.014	61.8	30.088	29.998	....	25.7	24.3	.137	88.	37	..	.6	Ci., Ci-cu.
	8	18.	764.10	29.993	61.8	30.094	30.004	....	29.5	27.2	.145	81.5	37	..	.4	Ci., Ci-cu.
	9	19.7	765.60	30.044	63.7	30.150	30.056	64.	33.5	29.1	.135	74.5	37	..	.1	Ci. in S.
	10	19.1	765.60	30.046	64.2	30.150	30.055	68.	36.	30.5	.133	69.3	45	..	.1	Ci. in S.
	11	19.	765.70	30.051	64.	30.156	30.061	74.	40.	34.	.146	65.3	45	..	.1	Ci. in S.
	12	19.2	765.25	30.032	64.	30.140	30.045	76.	42.2	36.2	.163	65.7	15	..	.1	Ci. in S.
	13	21.2	765.00	30.013	66.	30.125	30.024	86.	46.1	39.	.174	63.5	350	..	.2	Ci., W.
	14	22.	764.90	30.006	68.2	30.122	30.015	80.	48.	40.	.173	61.	345	..	.2	Ci., W.
	15	22.	764.00	30.006	69.	30.120	30.011	....	48.	40.5	.184	61.	340	..	.6	Ci., W.
	16	21.6	764.80	30.003	69.1	30.112	30.003	....	46.	40.	.196	61.7	4	..	.9	Ci., W.
	17	21.	765.25	30.023	68.9	30.126	30.017	....	43.	38.	.189	65.9	5	..	1.0	Ci., W.
	18	20.2	765.70	30.045	67.3	30.138	30.034	....	41.5	36.	.167	67.2	5	..	.9	Ci., Ci-cu., W.
	19	19.7	766.20	30.068	66.7	30.154	30.052	....	40.8	36.	.175	67.	5	..	A little Ci.	
	20	19.1	766.85	30.096	64.7	30.180	30.084	....	38.8	34.5	.169	70.	5	..	A little Ci.	
	21	17.6	766.85	30.104	60.9	30.180	30.093	....	38.	35.	.188	71.7	5	..	Clear.	
	22	20.	767.35	30.111	64.	30.200	30.105	29.5	36.5	34.	.186	75.	5	..	Clear.	
	23	20.	767.45	30.115	65.2	30.210	30.112	29.8	35.	32.4	.172	77.	5	..	Clear.	

Observed dew point: 9h., 20°.8; 15h., 27°.

FEBRUARY.] DAILY METEOROLOGICAL OBSERVATIONS. [1842.

Date.		Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Baume's.	Wind.		Clouds, and direction of their strata.
Day.	Hour.	Temp't, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temp't, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.	
11	0	19.1	767.45	30.119	64.8	30.210	30.112	27.7	33.5	31.2	.171	5	..	..
	1	20.7	768.00	30.134	66.3	30.230	30.128	25.3	33.2	30.5	.162	5	..	..
	2	23.7	768.05	30.122	70.2	30.235	30.128	27.5	33.7	31.	.165	5	..	..
	3	22.	767.75	30.118	71.	30.236	30.112	29.	34.	31.5	.171	5	..	..
	4	21.3	767.80	30.123	69.8	30.234	30.123	31.2	33.5	31.5	.176	5	..	..
	5	22.	768.10	30.130	69.5	30.239	30.129	...	33.7	31.7	.177	5	..	..
	6	22.7	768.35	30.138	69.2	30.244	30.135	...	34.	32.	.179	5	..	..
	7	23.	768.35	30.161	70.8	30.272	30.156	...	35.2	33.	.181	5	..	..
	8	20.4	768.30	30.170	70.8	30.272	30.156	...	35.5	33.7	.192	5	..	..
	9	20.8	768.00	30.172	69.	30.272	30.163	...	38.	35.7	.201	5	..	..
	10	20.3	768.30	30.148	67.1	30.258	30.153	...	42.8	37.6	.184	120	..	..
	11	21.2	768.25	30.142	67.2	30.254	30.149	79.	47.5	41.7	.215	120	..	..
	12	20.	767.60	30.121	67.5	30.225	30.120	83.	50.	43.	.213	0	..	..
	13	20.7	767.35	30.108	67.	30.216	30.113	...	50.9	43.4	.213	0	..	..
	14	21.3	766.70	30.081	67.3	30.188	30.083	...	52.7	45.2	.232	15	..	..
	15	21.4	766.20	30.060	68.	30.162	30.056	...	52.	44.5	.224	15	..	..
	16	21.	766.20	30.061	68.	30.168	30.062	...	50.6	44.5	.239	20	..	..
	17	20.5	765.85	30.049	67.8	30.160	30.054	...	49.	45.	.268	35	..	..
	18	20.	765.30	30.030	66.8	30.124	30.021	...	46.5	42.	.232	40	..	..
	19	20.	765.70	30.046	66.3	30.140	30.038	...	46.3	42.3	.240	40	..	..
	20	19.2	765.45	30.040	65.3	30.120	30.021	...	44.4	40.5	.235	40	..	..
	21	18.2	764.75	30.017	64.4	30.100	30.004	...	43.3	40.	.226	40	..	..
	22	18.	764.05	29.991	63.2	30.076	29.983	...	43.	40.5	.241	40	..	..
	23	18.5	763.65	29.972	63.1	30.050	29.957	...	43.6	40.6	.236	40	..	..

Observed dew point: 3h., 28°; 9h., 30°; 6, 15h., 33°.

FEBRUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
12	20.3	763.00	29.938	65.	30.035	29.937	...	43.5	41.	.246	83.	40	...	...	1.0	N.
1	21.6	763.00	29.931	67.5	30.035	29.931	...	43.2	41.7	.264	85.	40	...	...	1.0	A slight drizzle.
2	21.9	761.65	29.878	68.9	29.978	29.869	...	43.	42.2	.276	85.	39	...	...	1.0	Sprinkling slightly.
3	20.8	760.50	29.838	68.5	29.940	29.833	...	44.3	43.5	.290	85.	40	...	...	1.0	N., dark.
4	20.4	760.30	29.829	68.	29.928	29.822	...	44.5	43.8	.294	92.	39	...	...	1.0	N., dark.
5	22.5	760.70	29.838	69.3	29.956	29.847	...	45.7	45.3	.313	91.5	58	...	...	1.0	N., dark.
6	23.4	760.60	29.830	71.5	29.942	29.827	...	47.2	46.5	.323	92.	59	...	.01	1.0	N., slight rain.
7	21.5	760.45	29.832	70.5	29.940	29.828	...	47.4	46.5	.321	91.	57	...	...	1.0	Foggy.
8	...	...	29.871	...	...	29.869	...	46.1	...	+.317	91.5	40	...	...	1.0	Foggy.
9	20.6	761.50	29.862	68.	29.970	29.864	...	47.5	47.	.331	92.5	25	...	...	1.0	Very dense fog.
10	20.6	761.50	29.878	68.	29.930	29.874	...	48.	47.5	.337	92.5	25	...	...	1.0	Very dense fog.
11	21.	761.60	29.880	68.2	29.990	29.884	...	49.2	50.2	.370	92.	30	...	...	1.0	Ci., Cu.s.
12	21.7	761.65	29.879	69.3	29.990	29.881	...	51.6	50.4	.366	91.	30	...	...	1.0	Ci-cu., Ci-s.
13	21.4	761.65	29.881	69.2	29.990	29.881	...	52.6	50.6	.359	77.	110	...	...	1.0	Ci-cu., Ci-s.
14	21.6	761.70	29.882	69.2	29.992	29.883	...	54.8	50.7	.386	73.5	125	.3	...	1.0	Ci-s.
15	21.9	762.25	29.901	69.9	30.006	29.895	...	56.7	51.9	.344	72.4	110	.5	...	1.0	Ci., Cu., Ci-s.
16	21.5	762.60	29.918	69.7	30.030	29.920	...	57.7	51.8	.331	73.5	135	.1	...	1.0	Ci., Cu., Ci-s.
17	21.2	763.10	29.938	69.5	30.048	29.938	...	54.5	49.5	.311	76.2	190	...	...	1.0	Ci., Cu., Ci-s.
18	20.9	764.00	29.975	68.7	30.070	29.963	...	52.	48.	.304	76.	200	...	...	1.0	Ci., Cu., Ci-s.
19	20.2	764.50	29.998	67.5	30.090	29.986	...	50.	46.	.281	76.5	200	...	...	...	A little Ci-s.
20	19.9	764.75	30.009	66.7	30.098	29.996	...	48.	44.	.259	77.	200	...	...	...	A little Ci-s.
21	19.6	765.25	30.030	66.	30.124	30.023	...	45.7	41.8	.237	78.	223	...	...	.2	S., dark.
22	19.	765.40	30.039	65.2	30.126	30.028	...	44.	40.5	+.229	79.	224	...	...	.3	S., hazy.
23	...	...	...	...	...	...	...	...	...	...	...	250	...	...	...	...

* Fifteen minutes late.

+ Supplied.

Observed dew point: 3h., 39° 5; 9h., 46° 8; 15h., 46° 3.

FEBRUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[77]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.	
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.				
14	0	18.	754.40	29.612	64.	29.696	29.602	...	43.5	43.1	.290	91.3	50	1	..	1.0	N., very dark.
	1	19.	754.00	29.591	64.	29.682	29.588	...	43.6	43.3	.294	92.	33	..	..	1.0	N., very dark.
	2	21.	754.15	29.589	66.1	29.686	29.587	...	45.2	44.7	.305	92.	41	..	..	1.0	N., very dark.
	3	22.3	754.10	29.581	69.	29.682	29.575	...	45.9	45.2	.309	91.5	55	..	..	1.0	N., very dark.
	4	22.6	753.85	29.570	70.3	29.676	29.566	...	46.2	45.5	.312	91.	49	..	..	1.0	N., very dark.
	5	22.6	753.70	29.564	70.8	29.676	29.564	...	44.5	43.7	.292	91.	50	..	..	1.0	N., very dark.
	6	22.8	753.65	29.561	71.2	29.666	29.554	...	44.	43.2	.286	92.2	90	..	..	1.0	N., very dark.
	7	21.6	753.75	29.570	70.8	29.670	29.568	...	42.8	42.	.274	91.5	40	..	..	1.0	Dense fog.
	8	20.8	753.85	29.576	69.	29.676	29.569	...	44.5	43.5	.288	91.2	34	..	..	1.0	Dense fog.
	9	20.7	753.65	29.571	68.	29.673	29.569	...	45.2	41.5	.238	78.	90	..	..	.2	Cl., Cu., Ci-s, WSW.
	10	20.3	753.05	29.549	67.5	29.654	29.552	72.	47.6	41.4	.209	69.5	90	1.7	..	.1	Cl., Ci-cu., in SW., WSW.
	11	20.7	753.00	29.545	67.2	29.648	29.546	72.5	49.7	41.4	.185	60.5	100	3.0	..	.7	Cu., W.
	12	21.	752.50	29.524	67.6	29.630	29.527	...	49.6	40.	.156	55.5	100	4.0	..	.9	Cu., W.
	13	20.2	752.30	29.520	67.	29.622	29.520	...	48.5	39.7	.163	56.3	110	6.0	..	.9	Ci., Cu., Ci-s, W.
	14	19.3	752.60	29.535	66.	29.643	29.544	...	43.5	36.5	.156	62.	110	6.0	..	.9	Ci., Cu., Ci-s, W.
	15	19.7	753.70	29.578	65.7	29.680	29.582	...	42.7	35.5	.145	61.7	110	7.0	..	.7	Ci., Cu., W.
	16	20.7	755.00	29.623	66.8	29.730	29.628	...	42.	33.7	.119	57.	...	8.5	..	.6	Cu., W. by N.
	17	19.6	756.25	29.676	67.	29.770	29.667	...	36.	31.	.142	56.	110	8.0	..	..	A little Cu., W.
	18	17.2	757.50	29.737	64.8	29.810	29.714	...	32.5	27.5	.120	57.	110	8.5	..	..	Clear.
	19	16.	758.70	29.790	61.2	29.870	29.783	...	30.2	25.	.103	56.8	110	7.0	..	..	Clear.
	20	16.1	760.00	29.841	60.1	29.912	29.827	...	27.5	23.9	.113	59.	110	7.5	..	.4	Cu., W.
	21	14.2	760.80	29.883	58.8	29.944	29.862	24.5	26.	21.5	.092	57.	110	9.0	..	..	Clear.
	22	13.	761.60	29.919	56.	29.982	29.908	24.	24.5	20.5	.092	58.9	110	8.0	..	..	Clear.
	23	11.5	762.00	29.912	53.9	30.000	29.932	22.3	23.	21.2	.118	60.	130	7.0	Clear.

Observed dew point: 3h., 44°; 9h., 38°; 15h., 20° 2.

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Day.	Hour.	Barometer No. 1.		Barometer No. 2.			Thermometers, Fah.		Hygr., Samsure's.	Wind.		Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Radation.	Dry.		Dir., degrees.	Force, lbs.		
15	0	13.8	763.30	29.977	53.5	30.044	21.6	21.6	59.	130	9.0	..	Clear.
	1	15.8	764.50	30.019	56.7	30.084	20.9	21.4	59.	130	7.0	..	Clear.
	2	17.3	765.50	30.051	60.	30.136	20.3	20.8	59.6	110	3.5	..	Clear.
	3	15.5	765.65	30.065	60.2	30.138	19.7	20.3	60.	140	4.2	..	Clear.
	4	15.1	766.60	30.106	58.1	30.174	19.5	20.	60.	130	3.5	..	Clear.
	5	15.7	766.90	30.115	58.2	30.185	19.3	20.5	60.1	130	4.0	..	Clear.
	6	16.4	767.65	30.140	59.5	30.216	18.9	20.5	60.4	140	1.5	..	Clear.
	7	16.3	768.15	30.160	59.8	30.236	..	20.5	61.	120	..	..	Clear.
	8	16.	769.15	30.200	59.8	30.265	..	22.5	62.	110	1.0	..	Cu., WNW.
	9	16.1	769.50	30.214	59.9	30.288	..	22.5	61.2	120	..	..	Cu., WNW.
	10	16.2	769.85	30.228	59.3	30.305	..	26.	61.	70	..	..	Cu., WNW.
	11	17.	769.80	30.222	60.5	30.312	..	27.2	61.	100	..	..	Cu., WNW.
	12	18.	769.50	30.295	62.	30.300	..	28.	61.7	90	..	..	Cu., WNW.
	13	18.1	768.90	30.181	62.2	30.280	..	28.6	61.	115	..	..	Cu., WNW.
	14	19.	768.60	30.165	64.	30.266	..	30.	60.	110	..	..	6 Ci., Cu., (1) WNW., (2) W.
	15	18.2	768.20	30.151	63.8	30.254	..	32.	60.	100	..	..	6 Ci., Cu., (1) WNW., (2) W.
	16	17.6	768.10	30.153	62.6	30.250	..	32.2	60.	95	..	..	6 Ci., Cu., (1) WNW., (2) W.
	17	17.	768.65	30.178	61.8	30.256	..	31.3	61.	51	..	..	1.0 Ci., Cu., (1) WNW., (2) W.
	18	16.3	768.40	30.171	58.8	30.242	..	28.	64.	46	..	..	4 Ci., WNW.
	19	17.5	767.90	30.145	61.2	30.226	..	28.6	66.8	25	..	..	8 Ci., S.
	20	17.8	767.90	30.144	61.5	30.226	..	29.2	67.3	34	..	..	1.0 Ci., S.
	21	17.	767.70	30.140	61.	30.232	..	28.	69.	27	..	..	9 Ci., S.
	22	17.2	767.60	30.134	61.2	30.214	..	28.	69.	34	..	..	1.0 N.
	23	16.	766.55	30.099	60.7	30.186	..	28.	69.	330	..	..	..

Observed dew point: 16h., 14°; 21h., 16°.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr. Sausure's.	Wind.		Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.		
16	0 15.7	766.35	30.093	59.7	30.168	30.085	...	28.3	25.5	.130	325	...	.3	Cl., Cu., ? hazy.
17	1 17.8	765.35	30.043	61.	30.122	30.035	...	30.	28.3	.158	?	...	.3	Cl., Cu., ? hazy.
18	2 18.5	764.75	30.016	62.5	30.092	30.001	...	30.2	27.4	.141	?	...	.9	Cl., Cu., ? hazy.
19	3 17.5	762.45	29.930	62.7	30.018	29.929	...	31.2	29.	.157	73	...	1.0	N., ?
20	4 16.2	760.45	29.858	61.8	29.924	29.834	...	30.5	29.4	.171	79.2	...	1.0	N., ?
21	5 16.6	758.95	29.796	61.4	29.900	29.812	...	30.2	29.	.167	260	...	1.0	N., ?
22	6 17.	757.25	29.729	61.	29.812	29.725	...	30.	29.5	.177	252	...	1.0	N., snowing.
23	7 16.3	755.30	29.656	60.	29.732	29.649	...	38.5	32.5	.193	91.5	...	1.0	N., snowing.
24	8 17.2	753.70	29.589	60.8	29.670	29.584	...	38.7	37.6	.232	80	...	1.0	N., raining.
25	9 16.8	751.75	29.515	62.	29.608	29.520	...	41.5	40.5	.258	320	3.0	1.0	N., raining fast, S.
26	10 17.2	750.00	29.443	62.4	29.535	29.446	...	44.5	43.2	.281	330	9.0	1.0	N., raining fast, S.
27	11 17.9	748.90	29.397	63.	29.492	29.401	...	44.8	44.	.295	340	7.0	1.0	N., raining fast, S.
28	12 17.8	746.25	29.292	63.	29.380	29.289	...	45.4	44.1	.291	350	3.0	1.0	N., raining fast, S.
29	13 18.	743.40	29.179	63.4	29.275	29.183	...	45.7	44.9	.304	320	2.5	1.0	N., raining fast, S.
30	14 18.6	740.25	29.054	64.	29.156	29.064	...	45.9	45.1	.307	290	2.0	1.0	N., raining fast, S.
31	15 18.	739.05	29.009	64.	29.112	29.029	...	45.4	44.8	.305	40	...	1.0	N., S., very dense, S. WNW.
32	16 17.3	738.75	29.002	63.	29.090	29.001	...	37.5	36.5	.223	120	3.0	1.0	N., (broken,) rain, NW.
33	17 17.	736.85	28.928	62.	29.020	28.933	...	34.5	33.5	.199	120	3.0	1.0	N., (broken,) rain, NW.
34	18 17.2	737.30	28.944	61.8	29.020	28.934	...	34.	32.5	.187	120	2.9	1.0	N., (broken,) rain, NW.
35	19 16.5	737.50	28.956	61.3	29.030	28.945	...	33.5	31.5	.176	100	2.8	1.0	N., (broken,) snow, NW.
36	20 16.	737.85	28.971	60.3	29.050	28.968	...	33.	31.8	.186	110	3.2	1.0	N., (broken.)
37	21 15.	738.90	29.018	59.	29.084	30.005	...	31.5	30.5	.179	100	3.5	1.0	N., (broken,) slight snow.
38	22 14.2	739.95	29.062	56.8	29.120	30.046	...	30.	29.3	.174	80	4.5	1.0	N., (broken.)
39	23 14.	746.75	29.095	56.7	29.160	30.087	...	28.7	28.2	.169	100	7.0	1.0	N., (broken.)

Observed dew point: 9h., 40°; 15h., 44°.

* Twenty minutes late.

FEBRUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Day.	Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
17	0	13.9	742.20	29.152	56.	29.222	29.151	....	25.8	22.5	.110	70.	90	9.5	..	..	Clear.
	1	15.	744.10	29.222	57.3	29.296	29.221	....	22.1	18.9	.093	67.	105	12.0	..	..	A little Ci cu.
	2	15.	745.25	29.267	58.	29.340	29.262	20.	20.6	17.6	.089	64.	100	13.0	..	..	A little Ci-cu.
	3	16.2	746.30	29.302	59.3	29.380	29.297	18.7	19.2	15.7	.076	61.5	95	12.0	..	..	..
	4	14.2	747.90	29.376	58.3	29.440	29.360	16.5	17.5	13.	.055	64.	105	12.0	..	..	Ci-cu. ? at Hor.
	5	13.6	748.66	29.410	57.	29.466	29.390	15.6	16.5	13.4	.070	60.	100	14.0	..	.2	Scattered Ci-cu.
	6	13.1	750.25	29.473	55.5	29.530	29.458	15.	16.	13.1	.071	63.	90	10.0	..	.3	Cu., Ci-cu., Ci.
	7	13.3	751.65	29.526	55.3	29.586	29.514	14.5	16.	13.3	.074	64.	90	10.0	..	.6	Cu., Ci-cu., Ci.
	8	12.2	753.00	29.585	64.4	29.656	29.587	17.3	16.	13.3	.074	62.5	110	10.0	..	.6	Ci-cu., Ci.
	9	12.	754.60	29.650	53.2	29.718	29.652	....	16.5	14.	.079	62.	110	12.0	..	.7	Ci-cu., WNW.
	10	11.	755.55	29.690	52.	29.752	29.689	....	18.1	15.4	.082	62.	110	10.0	..	.7	Ci-cu., WNW.
	11	10.3	756.55	29.733	50.6	29.800	29.741	30.4	19.1	15.8	.078	61.7	90	10.0	..	.8	Ci., WNW.
	12	11.6	757.50	29.764	51.5	29.834	29.773	38.	19.5	16.3	.081	62.	90	9.0	..	.7	Ci-cu., WNW.
	13	11.	757.75	29.777	51.2	29.843	29.783	36.	20.2	16.9	.082	61.5	90	9.0	..	.6	Ci-cu., WNW.
	14	11.8	758.90	29.818	51.2	29.885	29.825	....	22.	18.	.080	60.	90	7.5	..	.7	Ci cu., WNW.
	15	13.	759.70	29.844	52.9	29.906	29.840	....	22.5	19.	.090	60.	90	7.0	..	.2	Cu., WNW.
	16	13.1	760.85	29.890	53.9	29.948	29.889	....	23.	20.5	.107	60.	90	5.0	..	.1	Cu., WNW.
	17	11.6	761.80	29.933	53.3	29.990	29.923	....	22.5	19.5	.097	59.	90	5.5	..	..	Clear.
	18	11.4	763.50	30.001	51.6	30.034	29.973	....	22.	19.	.095	60.3	90	4.3	..	..	Clear.
	19	10.7	764.00	30.024	51.2	30.064	30.004	21.	21.	19.	.095	60.7	90	2.2	..	..	Clear.
	20	11.3	764.95	30.059	50.3	30.098	30.039	20.	21.5	18.5	.092	62.	65	.5	..	..	Clear.
	21	11.8	766.00	30.097	51.3	30.154	30.094	17.3	20.5	18.	.095	65.	68	..	..	..	Clear.
	22	11.6	766.60	30.122	51.3	30.180	30.120	16.8	20.1	18.	.099	65.	75	Clear.
	23	10.7	766.90	30.139	51.	30.202	30.142	19.5	18.	.105	64.	75	Misty.

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February.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1843.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saunures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temp., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temp., Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
18	0	10.3	767.30	30.156	50.	30.212	30.154	16.	19.5	16.8	.088	64	105	..	.1	Cl-cu., Cl.
	1	9.8	768.00	30.186	48.8	30.226	30.171	15.	19.4	17.9	.105	68.	43	..	..	Slight trace of Cu. at W.
	2	11.	769.00	30.219	49.4	30.260	30.204	12.8	18.9	17.8	.108	68.	43	..	.1	Cl.
	3	14.	769.15	30.211	53.5	30.270	30.203	12.	19.	17.2	.099	67.	43	..	..	Clear.
	4	15.5	769.25	30.207	56.2	30.284	30.210	16.	20.	18.5	.107	69.	355	..	..	Clear.
	5	13.9	769.90	30.242	56.	30.320	30.246	14.8	20.	18.3	.104	68.	353	..	.2	Cl., Cl-cu in E.
	6	14.6	769.60	30.224	56.	30.300	30.226	17.6	20.5	19.9	.123	68.	300	..	.1	Cl., Cl-cu at Hor.
	7	15.8	770.00	30.234	57.9	30.320	30.241	19.7	21.4	18.9	.099	68.	315	..	.8	Cl., Cl-cu, S.
	8	15.5	770.15	30.241	58.2	30.316	30.236	...	23.4	20.5	.103	66.	310	..	1.0	Cl., S, Cl-cu.
	9	16.	770.60	30.253	59.	30.340	30.258	...	25.8	22.5	.109	65.3	330	..	1.0	Cl-cu., Cl-a., W.
	10	17.	770.00	30.230	60.3	30.320	30.234	...	29.6	26.	.124	65.5	330	..	1.0	Cl-cu., Cl-a., W.
	11	17.	768.90	30.188	61.1	30.280	30.193	...	33.1	28.7	.132	65.7	310	..	1.0	Cl-cu., Cl-a., W.
	12	16.	767.40	30.132	60.	30.214	30.129	...	41.4	33.	.111	66	350	1.0	.8	Cl-cu., Cl., W.
	13	15.	766.80	30.114	59.	30.192	30.110	...	41.5	34.	.129	56	350	2.5	.8	Cl-cu., Cl., W.
	14	15.5	766.15	30.085	58.	30.158	30.078	...	...	...	...	...	0	2.5	.7	Cl-cu., Cl., W.
	15	16.	765.45	30.055	59.	30.130	30.058	...	...	...	...	...	...	...	1.0	Cl cu., W.
	16	15.5	765.30	30.053	59.	30.132	30.050	...	43.5	35.4	.133	55.	359	2.0	1.0	Cl-cu., W.
	17	16.2	764.65	30.024	59.	30.008	29.926	...	43.9	36.7	.153	57.	0	1.0	1.0	Cl-cu., Cl-a., W.
	18	17.	764.50	30.014	60.5	30.070	29.974	...	43.	41.5	.273	74.	345	.9	1.0	Cl-cu., Cl-a., W.
	19	18.6	763.25	29.956	62.5	30.040	29.949	...	43.	40.	.330	76.	354	1.2	1.0	Cl-cu., Cl-a., W.
	20	19.3	761.75	29.899	64.	29.934	29.899	...	44.	41.2	.245	85	345	.2	1.0	Cl cu., W.
	21	17.5	761.00	29.873	63.3	29.954	29.860	...	45.5	43.8	.288	86	350	2.5	1.0	Cu., W.
	22	16.4	759.80	29.832	61.8	29.910	29.820	...	48.6	46.2	.301	86.2	343	4.7	1.0	Cl-a., Cl., Cu., SSW.
23	14.9	759.10	29.810	59.7	29.860	29.797	...	50.3	47.8	.318	86.	353	9.0	1.0	Cl-a., Cl., Cu., SSW.	
							...	49.8	48.	.329	89.	0	7.0	..	1.0	N, Cl., Cu., raining, SSW.

Observed dew point: 3h., 13°, 9h., 13°, 21h., 46°.

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
19	0	16.	758.10	29.766	59.	29.820	29.738	...	49.5	48.	.332	89.	350	10.0	.04	1.0	N., Ci cu., raining.
	1	20.4	757.85	29.737	63.9	29.830	29.735	...	49.5	48.5	.344	89.	342	10.0	.04	1.0	N., Ci-cu., raining.
	2	21.3	757.00	29.698	67.9	29.806	29.700	...	50.5	49.5	.356	92.	353	7.0	.08	1.0	Raining.
	3	21.1	756.25	29.669	69.4	29.770	29.680	...	51.3	50.5	.371	92.	300	8.0	.14	1.0	N., raining, Cu.
	4	20.6	754.10	29.589	68.8	29.670	29.563	...	52.2	51.5	.385	92.	350	4.0	.06	1.0	N., raining, Cu.
	5	19.5	751.50	29.491	67.2	29.576	29.474	...	53.8	53.	.405	92.	338	6.5	.10	1.0	N., raining, Cu.
	6	22.	751.75	29.499	66.	29.535	20.436	...	53.5	53.	.408	92.	325	9.0	.04	1.0	N., raining, Cu.
	7	20.4	752.00	29.508	66.5	29.500	29.490	...	54.	53.7	.420	92.	305	12.5	.34	1.0	N., raining, Cu.
	8	...	...	*29.531	...	...	*29.475	...	*52.9	...	*.404	*91.8	90	1.2	.12	1.0	N., raining, Cu. [SW.
	9	20.2	752.25	29.518	67.2	29.620	29.518	...	53.5	52.5	.396	91.	80	2.0	.01	1.0	N., W. [SW.
	10	20.9	753.50	29.544	68.	29.648	29.543	...	53.5	51.8	.366	83.	90	.6	...	.9	Cu., Ci-cu., (1) WNW., (2)
	11	20.2	754.00	29.587	68.	29.694	29.579	...	51.6	48.1	.311	80.	110	3.5	...	1.0	Cu., Ci-cu., WNW.
	12	18.3	754.80	29.628	66.	29.720	29.680	...	46.5	40.	.192	69.	110	4.5	...	1.0	Cu., Ci-cu., (1) WNW.,
	13	20.	755.40	29.611	65.8	29.740	29.640	...	45.	39.5	.199	70.3	130	6.0	...	.5	Cu., WNW., [(2) WSW.
	14	19.3	757.30	29.720	65.7	29.820	29.721	...	42.	36.5	.173	68.3	130	6.0	...	.4	Cu., Ci., W.
	15	20.2	758.60	29.774	66.	29.880	29.780	...	41.	35.7	.168	64.3	180	5.5	...	...	Cu., Ci., W.
	16	21.	760.00	29.818	67.	29.926	29.825	...	39.	32.5	.130	62.	130	4.7	...	.1	Ci., Ci-s. in S.
	17	20.8	762.00	29.896	68.	29.990	29.884	...	36.8	30.5	.126	59.	130	5.5	...	...	A little Ci-s.
	18	18.	763.40	29.965	65.8	30.056	29.955	...	33.3	30.6	.163	60.	115	5.2	...	...	A little Ci-cu. at S.
	19	15.5	764.65	30.026	61.7	30.100	30.012	...	32.	26.2	.104	60.	120	3.2	...	...	Clear.
	20	13.4	765.50	30.070	57.7	30.130	30.053	...	30.8	25.5	.105	60.5	115	3.0	...	...	Clear.
	21	13.3	765.55	30.112	55.3	30.180	30.108	...	30.1	24.7	.099	61.	140	2.8	...	...	Clear.
	22	16.7	768.10	30.157	57.6	30.226	30.149	...	28.8	24.9	.115	61.9	125	2.5	...	...	Clear.
	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

* Supplied.

Observed dew point: 3h., 49°; 9h., 52°; 15h., 23° 5.

Day.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.			Dir., degrees.	Force, lbs.			
21	0	10.	768.35	30.198	46.4	30.240	30.192	...	136	78.	53	2.0	..	..	Clear.
	1	11.1	768.40	30.195	46.4	30.236	30.182	19.	118	76.	53	..	..	..	Clear.
	2	13.3	768.20	30.177	51.	30.230	30.170	17.9	118	76.	53	..	..	..	Clear.
	3	12.9	767.50	30.152	52.5	30.210	30.146	21.	117	74.	53	..	..	..	Clear.
	4	13.6	767.60	30.152	52.8	30.216	30.154	17.	118	77.	54	..	..	..	Clear.
	5	13.2	767.45	30.147	52.7	30.200	30.136	18.	119	77.	54	..	..	..	Clear.
	6	12.8	767.15	30.138	52.7	30.200	30.136	19.	119	77.3	54	..	..	..	Clear.
	7	13.7	767.90	30.164	54.5	30.226	30.157	...	124	77.2	54	..	..	..	Clear.
	8	12.8	768.10	30.176	54.	30.232	30.164	...	120	75.	54	..	..	..	Clear.
	9	14.	768.40	30.182	54.4	30.256	30.187	...	116	71.3	160	..	..	..	Clear.
	10	14.	768.30	30.178	55.	30.253	30.182	...	119	71.	130	..	..	..	Clear.
	11	14.	767.60	30.150	55.	30.220	30.149	65.	112	68.7	140	..	..	..	Clear.
	12	15.	768.80	30.114	56.	30.192	30.118	70.	124	68.3	140	..	..	..	Ci-s. in S.
	13	16.7	766.80	30.106	58.	30.192	30.113	66.	118	65.5	120	..	..	..	Ci-s. in S.
	14	16.4	765.80	30.068	59.5	30.154	30.071	65.	126	65.	120	..	..	..	Ci-s. in S.
	15	16.	765.70	30.065	59.1	30.150	30.068	68.	135	63.7	110	..	..	..	Ci-s. in S.
	16	16.3	765.60	30.060	59.2	30.142	30.060	61.	120	63.5	110	..	..	..	Ci-s. in S.
	17	17.7	765.20	30.037	60.2	30.130	30.045	...	132	63.5	105	..	..	..	Ci-s. in S.
	18	18.4	765.90	30.062	62.3	30.136	30.045	...	146	67.	100	..	..	..	Ci-cu, Ci-s. in S.
	19	18.3	766.15	30.072	62.8	30.136	30.043	...	137	70.	100	..	..	..	Clear.
	20	17.2	765.90	30.067	62.5	30.130	30.038	...	146	72.	100	..	..	..	A few Ci-s. at Hor.
	21	17.3	765.80	30.063	62.	30.132	30.041	...	149	77.	100	..	..	..	A few Ci-s. at Hor.
	22	17.9	765.85	30.063	62.	30.136	30.046	20.	148	76.	105	..	..	..	A few Ci s. at Hor.
	23	16.9	765.65	30.059	61.4	30.130	30.042	19.	155	82.2	100	..	..	..	Clear.

Observed dew point: 3h., 21° 5; 9h., 14°; 15h., 21°; 21h., 21°.

February.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.						
22	0	16.3	765.30	30.049	60.4	30.110	30.024	15.	25.5	25.	.150	83.	100	..	..	Very few Ci-s.
	1	15.3	764.75	30.032	59.3	30.098	30.015	19.	25.	24.5	.149	86.	100	..	..	Clear.
	2	15.	764.75	30.033	58.	30.093	30.014	18.4	24.6	24.1	.145	86.9	100	..	..	Clear.
	3	16.3	764.30	30.010	58.3	30.078	29.998	21.	24.1	23.6	.142	86.7	100	..	..	Clear.
	4	17.	764.00	29.994	59.8	30.074	29.989	20.6	24.	23.5	.142	86.	100	..	..	Clear.
	5	17.5	763.70	29.979	61.	30.070	29.983	20.6	23.5	23.	.139	85.	99	..	..	Clear.
	6	17.4	763.70	29.979	61.7	30.070	29.982	21.	24.	23.	.134	86.	99	..	..	1.0 Ci., Cu.
	7	17.3	764.10	29.996	61.7	30.072	29.984	20.	26.	25.5	.153	88.	110	..	..	1.0 Ci-cu., S.
	8	16.8	764.00	29.995	61.	30.072	29.985	..	27.5	26.5	.154	85.	95	..	..	1.0 Ci., S., Ci-cu.
	9	15.5	763.90	29.996	59.7	30.054	29.971	..	30.	27.7	.148	81.	265	..	..	.7 Ci-cu.
	10	17.	763.95	29.998	59.5	30.054	29.971	..	33.3	30.7	.164	71.	266	..	..	.6 Ci-cu.
	11	18.5	763.80	29.978	61.9	30.050	29.960	69.	35.7	31.5	.153	71.9	340	..	..	.3 Ci-cu., Ci-s.
	12	19.5	763.10	29.946	64.	30.045	29.950	71.5	37.2	32.2	.145	69.3	0	..	..	1 Cu., Ci-s.
	13	19.5	763.50	29.923	66.	30.023	29.924	68.5	38.7	34.2	.165	69.5	15	..	..	1 Cu., Ci-cu., Ci.
	14	20.6	762.30	29.909	66.	30.017	29.916	70.	39.8	34.3	.154	66.5	85	..	..	.2 Cu.
	15	19.8	762.15	29.908	66.4	30.012	29.910	..	39.8	34.8	.164	67.	70	..	..	.8 Cu.
	16	19.6	762.50	29.923	66.	30.025	29.924	..	39.1	33.3	.144	66.	?	..	..	1.0 Cu., Ci-s.
	17	19.1	762.50	29.924	65.1	30.025	29.927	..	38.5	33.5	.153	66.	110	..	..	1.0 Cu., Ci-s.
	18	19.2	763.35	29.957	64.9	30.042	29.944	..	37.	32.5	.152	67.	110	..	..	.9 Cu., Ci-s.
	19	19.3	763.40	29.959	64.9	30.044	29.946	..	38.5	32.	.148	68.	110	..	..	1.0 Cu., Ci-s.
	20	17.1	764.15	30.000	63.	30.054	29.961	..	32.5	30.5	.169	80.3	110	..	..	.3 Cu., Ci-cu.
	21	16.5	764.40	30.013	61.5	30.070	29.982	..	32.5	30.	.166	83.	110	..	..	.3 Cu.
	22	15.4	764.35	30.016	59.7	30.084	29.984	37.8	31.9	29.7	.162	81.3	120	..	..	.3 Cu.
	23	15.3	764.55	30.024	58.8	30.090	30.008	30.7	31.6	29.	.153	79.	122	..	..	.4 Ci-cu.

Observed dew point: 3h., 24° 5; 15h., 31°; 21h., 28°.

FEBRUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

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Day.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
23	0 16.	765.05	30.039	58.1	30.100	30.021	28.6	30.9	28.5	.152	78.	120	.2	..	..	Clear.
	1 17.2	765.45	30.049	59.6	30.108	30.026	26.2	30.	27.5	.145	77.2	120	..	..	..	Clear.
	2 17.6	765.75	30.060	61.	30.144	30.057	26.	29.	26.7	.142	78.1	120	..	..	..	Clear.
	3 18.	765.90	30.064	62.3	30.150	30.059	25.6	28.5	26.	.136	79.	120	..	..	..	Clear.
	4 17.1	766.20	30.080	62.	30.144	30.054	26.	28.	25.5	.133	78.8	122	..	..	..	Clear.
	5 16.3	766.50	30.096	61.7	30.168	30.080	25.9	27.7	25.5	.136	79.	128	..	..	..	Clear.
	6 15.2	766.90	30.117	59.5	30.200	30.117	25.	27.1	25.	.134	79.	135	..	..	..	Few S.
	7 14.6	767.30	30.131	58.	30.186	30.107	....	26.2	24.5	.135	80.	135	..	..	..	Very few S.
	8 14.8	767.70	30.151	57.	30.212	30.136	....	28.5	25.7	.131	77.9	138	..	..	..	Clear.
	9 16.	768.00	30.156	58.	30.237	30.158	61.	30.1	27.	.126	76.3	135	..	..	..	Clear.
	10 17.	768.40	30.168	59.2	30.258	30.176	71.5	32.	28.3	.137	74.5	115	..	..	..	Clear.
	11 17.5	768.40	30.165	61.	30.256	30.169	73.	34.	29.8	.141	72.3	115	..	..	..	Ci.
	12 16.	767.85	30.150	61.1	30.233	30.146	....	35.	30.5	.143	70.	70	..	..	..	Cu., Ci., W.
	13 16.8	767.00	30.113	65.3	30.192	30.093	....	37.1	32.1	.143	69.3	45	.2	..	..	Cu., Ci., W.
	14 17.2	766.50	30.091	61.	30.178	30.091	62.5	37.5	32.3	.142	68.5	10	.5	..	..	Cu., Ci., W.
	15 17.	765.90	30.069	61.2	30.158	30.071	55.	38.1	32.8	.145	68.	20	1.0	..	..	Cu., Ci.
	16 17.	765.90	30.069	61.	30.157	30.070	54.	38.3	33.2	.150	68.3	45	.9	..	..	Slight Ci.
	17 15.8	765.80	30.070	60.2	30.150	30.065	....	36.5	32.8	.163	68.9	45	1.0	..	..	Slight Ci.
	18 15.7	765.55	30.060	59.1	30.136	30.052	....	34.	31.	.162	72.3	35	.5	..	..	Slight Ci.
	19 15.4	765.40	30.056	59.	30.130	30.046	....	33.8	30.8	.160	73.	85	..	..	..	Ci-cu.
	20 14.3	765.50	30.065	57.4	30.134	30.067	....	32.5	30.4	.167	75.8	35	..	..	..	Ci-cu.
	21 14.5	765.90	30.081	56.5	30.142	30.087	....	32.7	30.5	.167	75.2	35	..	..	..	Ci-cu.
	22 15.6	766.20	30.087	57.1	30.152	30.076	....	32.5	30.5	.169	75.2	35	..	..	..	Ci-cu.
	23 16.8	765.90	30.070	59.	30.158	30.068	....	31.5	30.	.171	76.5	35	..	..	..	Ci-cu.

Observed dew point: 9h., 22°, 15h., 23°.

FEBRUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Day.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hyg., Saunures's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
24	0 17.3	765.80	39.063	60.4	30.146	30.060	....	30.5	29.4	.154	77.	35	..	..	..	Clear.
	1 17.9	765.85	39.055	61.2	30.140	30.053	....	30.6	28.5	.155	77.2	30	..	..	..	Clear.
	2 17.1	765.20	39.040	61.1	30.124	30.037	31.7	30.7	28.6	.166	78.	20	..	..	..	Clear.
	3 16.	765.10	39.041	59.	30.116	30.034	27.4	29.5	28.5	.166	80.	20	..	..	..	Clear.
	4 17.	765.20	39.041	60.	30.122	30.037	23.3	28.5	27.	.152	85.	20	..	..	..	Clear.
	5 17.3	765.40	39.047	60.5	30.127	30.041	23.3	28.4	27.	.153	85.	20	..	..	..	Clear.
	6 17.6	765.60	39.054	61.	30.132	30.043	23.3	28.	27.	.157	86.	20	..	..	..	A few Ci-cu.
	7 17.8	765.90	39.065	61.8	30.150	30.061	....	28.2	27.3	.159	86.	20	..	..	..	Clear.
	8 16.8	766.00	39.074	61.	30.154	30.067	....	32.	30.	.166	82.2	20	..	..	..	Ci., Ci-cu.
	9 17.9	766.40	39.085	61.5	30.180	30.092	68.	35.6	32.6	.170	79.3	20	..	..	..	Ci., W.
	10 18.	766.50	39.088	62.2	30.180	30.090	....	38.5	35.	.182	77.	20	..	..	..	Ci., Ci-cu, Ci-s., W.
	11 18.7	766.50	39.085	63.	30.180	30.087	....	40.8	36.5	.185	75.	20	..	..	..	Ci., Ci-cu, Ci-s., W.
	12 18.7	766.30	39.077	63.5	30.170	30.076	78.	43.6	38.6	.195	72.7	20	..	..	..	Light Ci-s.
	13 19.	765.90	39.059	63.8	30.154	30.059	77.5	45.3	40.1	.206	71.	20	..	..	..	Light Ci-s.
	14 19.4	765.70	39.049	64.5	30.150	30.054	77.	47.1	41.6	.217	70.	20	..	..	..	Ci-s., haze.
	15 19.6	765.60	39.044	64.9	30.140	30.042	....	48.4	43.	.231	69.2	20	..	..	..	Ci-s., haze, Ci.
	16 19.6	765.60	39.044	65.1	30.140	30.042	....	48.5	43.5	.242	68.4	20	..	..	..	Ci-s., haze.
	17 19.4	765.90	39.057	65.	30.152	30.054	....	47.	43.	.247	71.	20	..	..	..	Ci-s., haze.
	18 18.8	766.60	39.087	64.7	30.170	30.072	....	43.5	40.5	.235	72.	20	..	..	..	Ci-s., haze.
	19 18.6	766.75	39.095	64.2	30.176	30.081	....	42.5	39.5	.226	74.	20	..	..	..	Ci-s., haze.
	20 17.2	767.30	39.132	62.4	30.198	30.107	....	39.	36.	.196	77.8	20	..	..	..	Ci-s., haze.
	21 17.	767.70	39.140	61.7	30.210	30.120	....	38.5	36.	.202	80.8	20	..	..	..	Ci-s., haze.
	22 17.2	768.15	39.156	61.8	30.230	30.140	....	35.5	34.	.197	86.	272	..	..	..	Clear.
	23 16.1	768.15	39.162	60.8	30.232	30.145	....	38.3	35.	.184	81.5	272	..	..	..	Clear.

Observed dew point: 3h., 27° 5; 9h., 27° 5; 15h., 36°; 21h., 32° 5.

FEBRUARY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1843.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Fausnure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
25	0	768.60	30.176	60.6	30.250	30.164	34.7	37.	.190	83.	270	..	..	..	Clear.
	1	768.85	30.181	61.6	30.264	30.176	34.1	36.2	.189	84.9	245	..	..	..	Clear.
	2	769.10	30.188	62.3	30.280	30.189	33.	35.5	.189	86.2	240	..	..	..	Clear.
	3	769.30	30.195	62.3	30.276	30.185	33.2	36.9	.156	79.	240	..	..	..	Clear.
	4	769.50	30.211	61.2	30.298	30.199	34.8	36.7	.173	80.	242	..	..	..	Clear.
	5	769.90	30.229	59.6	30.308	30.224	34.2	36.6	.184	79.	240	..	..	..	Clear.
	6	.....	*30.234	.....	.....	*30.231	.....	*36.4	*.182	*75.5	240	1.6	..	..	Clear.
	7	771.15	30.278	59.2	30.358	30.275	.....	34.5	.171	79.	242	2.2	..	..	A few Ci-s.
	8	771.80	30.304	59.1	30.376	30.293	.....	35.3	.173	81.	245	2.0	..	..	Clear.
	9	772.40	30.327	59.	30.414	30.331	.....	37.4	.185	82.7	250	1.4	..	..	Hazy.
	10	772.50	30.329	59.8	30.418	30.338	.....	40.5	.186	83.	255	1.9	..	.8	Ci-s., Ci s.
	11	772.65	30.328	61.3	30.422	30.332	.....	43.1	.201	78.	275	2.5	..	.9	Ci-cu., Ci-s., Cu.
	12	772.40	30.318	62.	30.412	30.321	.....	44.	.198	76.	255	2.8	..	1.0	Ci-s.
	13	772.00	30.308	62.	30.400	30.309	.....	42.8	.202	77.5	250	2.4	..	1.0	Ci-s.
	14	771.60	30.294	61.	30.380	30.291	.....	41.7	.206	80.3	250	2.0	..	1.0	Ci-s., Ci-cu.
	15	771.50	30.289	61.	30.376	30.287	.....	41.2	.312	82.	250	1.8	..	1.0	Ci-s., Ci-cu.
	16	771.20	30.275	61.4	30.362	30.272	.....	40.1	.312	84.5	245	1.8	..	1.0	Ci-s., Ci-cu.
	17	771.20	30.274	61.7	30.362	30.273	.....	41.	.230	85.	255	..	..	1.0	Ci-s., Ci-cu.
	18	771.35	30.283	61.2	30.366	30.278	.....	40.	.230	86.4	258	1.1	..	1.0	Ci-s., Ci-cu.
	19	771.35	30.283	60.9	30.366	30.278	.....	39.2	.230	89.1	258	1.2	..	1.0	Ci-s., hazy.
	20	771.35	30.280	62.1	30.366	30.276	.....	38..	.237	92.2	255	1.5	..	1.0	Ci-s., hazy.
	21	771.35	30.273	63.5	30.366	30.272	.....	37.4	.237	92.8	255	1.6	..	1.0	Ci s., hazy.
	22	771.30	30.278	63.7	30.364	30.270	.....	37.	.238	93.	255	1.4	..	1.0	Ci-s., N., rain.
	23	770.70	30.251	63.	30.340	30.246	.....	36.6	.233	93.	245	1.4	..	1.0	Ci-s., N., rain.

* Supplied.

Observed dew point: 9h., 33°; 15h., 33° 7.

Day.	Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hyg., Gauges.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.		Dir., degrees.	Force, lbs.			
26	0	17.9	770.25	30.234	62.7	30.339	30.238	...	37.1	36.5	240	1.8	1.0	1.0	N., misting rain.
	1	18.1	769.80	30.216	62.8	30.310	30.218	...	37.7	37.1	252	1.7	1.0	1.0	N., misting rain.
	2	18.3	769.20	30.191	63.	30.280	30.186	...	37.7	37.3	250	2.3	1.0	1.0	N., misting rain.
	3	18.2	768.80	30.176	62.9	30.256	30.162	...	38.	37.7	244	2.0	1.0	1.0	N., misting rain.
	4	20.	768.50	30.156	64.6	30.240	30.142	...	38.8	38.3	235	2.2	1.0	1.0	N., raining.
	5	20.6	768.15	30.141	66.5	30.234	30.131	...	39.	38.6	247	2.2	.04	1.0	N., misting rain.
	6	20.4	767.75	30.125	67.	30.220	30.117	...	39.2	38.6	240	2.8	1.0	1.0	N., misting rain.
	7	19.9	767.50	30.117	67.	30.210	30.107	...	39.2	38.6	245	3.7	1.0	1.0	N., drizzle.
	8	18.7	767.10	30.108	65.6	30.205	30.105	...	39.5	38.7	240	3.5	.07	1.0	N., rain.
	9	17.9	766.75	30.099	64.	30.186	30.091	...	39.7	39.2	242	4.0	.04	1.0	N., rain.
	10	17.1	766.50	30.052	62.9	30.150	30.057	...	40.	39.2	244	3.3	.03	1.0	N., rain.
	11	17.6	764.40	30.007	62.5	30.115	30.021	...	40.6	39.7	250	.5	1.0	1.0	N., drizzle.
	12	18.9	763.35	29.958	63.6	30.050	29.956	...	41.1	40.7	250	3.7	.07	1.0	N., rain.
	13	19.2	763.50	29.967	66.	30.068	29.970	...	41.5	41.	190	3.6	.19	1.0	N., rain, NE.
	14	18.7	761.60	29.892	64.8	29.985	29.887	...	40.3	39.5	200	3.7	.13	1.0	Cu., Ci-cu., Ci-s., (1) N., (2) [WSW.
	15	18.7	761.30	29.890	64.1	29.975	29.880	...	41.5	40.	210	1.6	1.0	1.0	Ci-s., N., NE.
	16	18.7	761.20	29.876	64.	29.972	29.876	...	41.6	40.4	225	2.5	1.0	1.0	Ci-s., N.
	17	19.	761.20	29.874	64.5	29.972	29.877	...	40.6	39.7	215	1.0	1.0	1.0	Ci-s., N.
	18	18.3	761.20	29.877	64.1	29.972	29.877	...	39.5	39.	215	.2	1.0	1.0	Ci-s., N.
	19	18.3	763.35	29.961	63.7	30.000	29.905	...	38.1	37.7	240	1.80	1.0	1.0	Drizzling, N.
	20	17.7	762.00	29.911	62.8	29.990	29.897	...	38.	37.3	232	1.70	1.0	1.0	Drizzling, N.
	21	17.	761.70	29.904	61.8	29.968	29.878	...	37.7	37.	230	1.90	1.0	1.0	Drizzling, N.
	22	16.7	761.65	29.903	61.2	29.960	29.873	...	37.7	37.	210	...	1.0	1.0	Clear.
	23	...	...	...	...	...	...	...	...	...	...	...	...	...	Clear.

Observed dew point: 21h., 36°.5.

1842. [97]
FEBRUARY. DAILY METEOROLOGICAL OBSERVATIONS.

Date.	Barometer No. 1.				Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Dir., degrees.			Force, lbs.				
28	0	14.8	764.25	30.015	57.9	30.074	29.995	...	40.6	37.1	.199	78.	97	1	..	2	S.
	1	13.5	763.80	30.002	55.9	30.064	29.990	37.6	40.	37.	.204	78.2	105	..	..	..	Clear.
	2	12.7	763.60	29.998	54.3	30.050	29.981	35.7	38.6	36.2	.204	80.6	101	..	..	..	Clear.
	3	12.	763.50	29.998	53.3	30.046	29.979	34.3	37.6	36.	.212	81.2	100	..	..	..	Clear.
	4	11.	763.30	29.994	51.6	30.050	29.989	34.	38.1	35.5	.196	80.	130	..	..	..	Clear.
	5	10.9	763.55	30.005	50.8	30.050	30.000	31.6	36.3	34.4	.195	82.	130	..	..	..	Clear.
	6	11.8	764.10	30.022	50.5	30.070	30.011	30.2	36.5	34.5	.195	82.	130	..	..	.4	Few S.
	7	15.	765.00	30.042	54.2	30.116	30.048	...	37.1	35.	.197	82.	127	..	..	..	Ci.s., Ci-qu.
	8	17.	765.70	30.061	57.8	30.120	30.041	...	40.3	37.3	.206	80.	130	..	..	..	Ci.s., Ci-qu.
	9	19.2	765.90	30.068	62.	30.150	30.060	...	43.6	39.1	.206	76.	120	..	..	.1	Ci, Ci-qu.
	10	19.2	766.30	30.074	64.	30.170	30.075	73.	45.	40.	.208	74.8	140	3	..	.1	Ci, Cu.
	11	19.4	766.05	30.063	64.6	30.160	30.054	72.5	46.2	40.5	.206	72.	150	5	..	.1	Ci, Cu.
	12	19.6	766.10	30.064	65.	30.162	30.064	80.5	48.2	42.2	.218	71.	145	3	..	.3	Ci, Cu, W.
	13	20.2	765.80	30.049	65.5	30.150	30.051	83.	49.	42.8	.221	70.	145	2	..	.2	Ci, Cu, W.
	14	22.	765.65	30.035	67.8	30.140	30.035	82.	50.3	44.	.233	69.	120	..	..	.3	Ci.s., Cu, W.
	15	23.3	765.90	30.038	70.	30.158	30.048	78.5	51.5	45.3	.248	68.7	120	..	..	.6	Ci, Ci.s., Cu, W.
	16	25.3	766.45	30.051	73.2	30.176	30.056	...	51.8	46.	.261	68.	120	..	..	1.0	Ci, Ci.s., Cu, W.
	17	22.9	766.60	30.069	74.4	30.178	30.055	...	49.9	45.5	.270	73.	75	..	..	1.0	Ci, Ci.s., Cu.
	18	23.8	766.60	30.063	73.1	30.178	30.059	...	48.1	44.3	.264	73.5	300	2	..	1.0	Ci, Ci.s., Cu.
	19	22.1	766.60	30.071	71.5	30.178	30.063	...	46.5	40.	.201	78.2	300	..	..	.3	Ci.s.
	20	21.7	766.60	30.074	70.1	30.178	30.067	...	43.	41.5	.262	81.	300	5	..	..	Clear.
	21	21.7	767.30	30.101	69.6	30.186	30.076	...	41.5	39.2	.231	82.	350	..	..	.2	Ci.s.
	22	22.	767.60	30.110	69.2	30.202	30.093	...	41.5	39.5	.237	83.9	330	..	..	1.0	
	23	21.7	768.00	30.129	69.5	30.230	30.110	...	41.5	40.5	.258	85.2	330	..	..	1.0	Cu, N.

Observed dew point: 3h., 32° 3; 9h., 33° 5; 15h., 36° 3.

MARCH.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.				Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygt., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.	
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.		Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.				
Day.	1	0	20.8	768.00	30.133	69.	30.228	30.119	...	41.5	40.	247	87.2	330	...	.02	1.0	N., raining.
		1	20.1	767.60	30.121	67.5	30.208	30.104	...	41.8	40.5	254	90.	330	...	.01	1.0	N., raining.
		2	19.8	767.40	30.115	65.9	30.200	30.099	...	41.5	40.5	258	90.2	330	...	...	1.0	N.
		3	19.6	767.20	30.107	65.7	30.194	30.095	...	41.7	40.7	261	90.2	327	...	...	1.0	Cl cu.
		4	19.3	767.05	30.102	65.5	30.184	30.085	...	42.	41.	264	90.3	322	...	...	1.0	Cl cu.
		5	18.3	766.70	30.094	64.7	30.178	30.082	...	41.8	40.7	259	90.5	322	...	...	1.0	Cl cu.
		6	19.8	767.00	30.099	65.	30.184	30.086	...	42.3	41.2	264	89.4	322	...	...	1.0	Cl cu., Cl s.
		7	20.4	767.05	30.098	66.	30.190	30.089	...	41.6	40.5	257	92.	322	...	...	1.0	Cl cu., Cl s.
		8	21.5	767.70	30.119	67.8	30.216	30.110	...	42.3	41.5	270	92.	322	...	...	1.0	Cl cu., Cl s.
		9	21.	767.50	30.112	68.9	30.214	30.105	...	44.8	43.2	277	86.7	330	...	...	1.0	Cl cu., Cl s., W.
		10	20.9	766.90	30.090	68.	30.193	30.087	...	47.4	45.5	259	88.	330	...	...	1.0	Cl cu., Cl s., W.
		11	20.8	766.65	30.080	68.	30.184	30.078	...	49.7	47.4	316	86.	330	...	...	1.0	Cl cu., Cu., Cl s., W.
		12	20.2	765.75	30.047	67.4	30.150	30.046	...	52.8	48.3	302	79.	330	...	...	1.0	Cl cu., Cu., Cl s., W.
		13	20.6	765.10	30.019	67.6	30.120	30.016	...	55.	49.5	305	76.	10	2	...	1.0	Cl cu., W. by S.
		14	21.	764.10	29.978	68.	30.084	29.978	...	56.3	50.	302	73.	15	2	...	3	Cl cu., W. by S.
		15	21.3	763.60	29.957	68.9	30.060	29.951	...	57.8	51.1	313	72.7	25	1	...	3	Cl cu., Cl.
		16	21.	763.30	29.946	68.7	30.054	29.947	...	57.7	51.5	323	73.8	25	1	...	2	Cu., Cl., Cl s.
		17	21.1	763.00	29.934	68.7	30.042	29.935	...	56.	50.9	328	75.	10	...	...	1	Cu., Cl., Cl s.
		18	20.6	762.70	29.925	68.2	30.020	29.914	...	53.	49.4	326	77.	340	...	...	1.0	Cu., Cl cu., Cl s.
		19	21.3	762.15	29.901	68.1	30.000	29.894	...	51.5	50.2	361	83.	310	7	...	1.0	Cu., Cl cu.
		20	21.8	762.15	29.898	69.1	30.000	29.891	...	50.	48.	327	88.	308	4	...	1.0	Cl s., N.
		21	21.2	761.80	29.887	68.9	29.986	29.877	...	49.5	47.5	321	88.	320	...	...	1.0	Cl s., N.
		22	20.9	761.00	29.857	68.7	29.955	29.849	...	49.4	47.9	330	91.	325	...	...	1.0	Cl s., N.
	23	20.	760.45	29.840	67.4	29.925	29.822	...	49.2	46.	336	92.	325	...	...	1.0	Raining very little.	

Observed dew point: 9h., 43°; 15h., 46°; 21h., 45° 5.

MARCH.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

000

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
2	20.3	760.05	29.823	66.9	29.925	29.823	...	48.5	.314	92.9	325	...	...	...	Raining.
1	21.3	759.40	29.792	68.	29.900	29.794	...	48.5	.344	92.7	325	...	...	...	Misty.
2	21.8	758.40	29.751	68.9	29.848	29.739	...	48.1	.341	92.9	325	...	...	...	Misty.
3	21.6	757.65	29.722	69.2	29.820	29.711	...	48.	.340	92.5	323	...	1.0	...	N., S.
4	23.6	757.50	29.767	71.	29.820	29.706	...	48.5	.336	92.7	323	...	1.0	...	Thick fog, N.
5	23.5	757.35	29.701	72.	29.814	29.697	...	48.5	.340	92.7	323	...	1.0	...	Thick fog, N.
6	23.5	757.15	29.693	73.	29.808	29.689	...	48.5	.343	92.3	323	...	1.0	...	Thick fog, N.
7	23.2	757.00	29.688	72.7	29.800	29.682	...	48.5	.343	92.7	323	...	1.0	...	Thick fog, N.
8	22.5	756.45	29.670	72.	29.780	29.663	...	49.	.354	92.3	324	...	...	...	A little rain, thick fog, N.
9	22.2	755.50	29.635	71.2	29.747	29.635	...	49.8	.356	93.	325	...	...	...	Thick fog, rain.
10	21.8	754.55	29.601	70.8	29.706	29.594	...	50.5	.363	92.7	325	...	...	...	Thick fog, rain.
11	21.8	753.70	29.567	70.5	29.640	29.530	...	53.6	.382	92.7	325	...	...	...	Thick fog.
12	21.9	752.25	29.510	70.2	20.610	29.501	...	54.7	.415	92.7	325	...	...	...	Thick fog.
13	22.	751.10	29.464	70.2	29.574	29.465	...	57.7	.458	92.5	350	...	...	...	Thick fog.
14	22.4	750.15	29.424	71.	29.540	29.428	...	60.	.506	93.	30	...	...	...	N., slight rain, SW.
15	22.8	749.00	29.377	71.7	29.492	29.379	...	61.7	.519	92.	25	...	...	...	N., SW.
16	23.	749.25	29.386	72.	29.498	29.383	...	63.2	.517	89.	40	...	...	...	N., Ci cu., Ci s., SW.
17	23.	748.70	29.365	72.2	29.463	29.348	...	63.	.505	88.2	35	...	...	...	N., Cu., Ci s., SW.
18	23.	749.30	29.388	72.2	29.498	29.383	...	62.	.501	89.	40	...	...	...	N., Ci cu., Ci s., SW.
19	22.7	749.20	29.385	72.1	29.494	29.379	...	61.7	.485	90.	45	...	...	...	N., Ci cu., Ci s.
20	22.	750.00	29.421	71.5	29.514	29.401	...	59.5	.459	90.2	40	...	...	...	Clear.
21	21.7	750.25	29.432	70.5	29.512	29.402	...	59.5	.459	90.	40	...	...	...	Clear.
22	21.1	750.50	29.445	69.9	29.541	29.432	...	58.	.446	91.2	50	...	...	...	Clear.
23	20.9	750.90	29.462	69.1	29.548	29.441	57.7	56.	.439	91.	60	...	...	...	Clear.

Observed dew point: 3h., 48°; 9h., 47° 8; 15h., 60° 5; 21h., 56° 5.

March.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Day.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
3	20.8	750.85	29.460	68.5	29.556	29.451	56.5	56.8	55.	.424	48	.1	..	..	Clear.
1	21.	751.50	29.484	68.3	29.576	29.471	54.8	56.	54.3	.413	50	..	..	.1	S.
2	21.7	753.80	29.540	69.	29.626	29.519	53.	54.5	53.	.397	47	..	..	.2	Cl.s., Cl-cu.
3	22.2	753.80	29.569	69.8	29.678	29.569	..	57.7	53.2	.364	130	..	..	.8	Cl.s., Cl-cu.
4	22.8	754.95	29.612	70.6	29.722	29.612	..	56.2	52.	.354	120	..	..	.8	Cl.s., Cl-cu.
5	23.4	756.10	29.654	71.4	29.766	29.653	..	54.8	49.6	.311	69.	..	..	.7	Cl.s., Cl-cu.
6	24.	757.25	29.695	72.4	29.806	29.690	..	53.5	47.	.265	85	..	..	.7	Cl.s., Cl-cu.
7	24.	757.85	29.719	73.	29.828	29.711	..	53.	46.	.249	68.	..	..	.7	Cl.s., Cl-cu.
8	24.	758.45	29.742	73.2	29.856	29.739	..	55.5	47.6	.257	67.	..	..	.2	Cl.s. at Hor.
9	24.	758.90	29.759	73.	29.876	29.757	..	57.8	51.6	.326	35	..	..	.1	Cl., Cl-cu.
10	23.5	759.80	29.768	73.	29.870	29.751	89.	60.	53.5	.349	73.7	.1	..	.1	Cl., Cl-cu.
11	23.	758.50	29.749	72.3	29.860	29.742	89.	63.5	55.7	.367	35	.2	..	.3	Cl., Cl-cu.
12	23.3	759.10	29.731	72.3	29.850	29.732	88.	65.5	56.7	.372	35	.4	..	..	Cl. in S.
13	23.7	757.75	29.717	72.7	29.830	29.712	94.	68.4	57.8	.369	86.	1.2	..	..	Cl., Cu.
14	24.	757.10	29.688	73.2	29.806	29.686	93.	70.	59.5	.399	65.7	40	..	..	Cl., Cu.
15	24.5	757.35	29.697	74.	29.814	29.692	86.	70.5	59.7	.399	65.3	40	..	..	Cl., Cu.
16	24.8	757.55	29.704	74.7	29.822	29.699	88.	70.8	61.5	.448	35	1.5	..	.8	Cl., Cu.
17	25.	757.85	29.714	75.	29.834	29.709	..	69.	60.5	.438	66.	40	..	..	Cl. at Hor.
18	25.5	758.00	29.716	75.7	29.840	29.714	..	63.7	58.7	.445	73.	40	..	..	Clear.
19	25.6	758.40	29.732	75.8	29.852	29.725	..	62.6	57.5	.436	74.	40	..	..	Clear.
20	25.4	758.60	29.742	76.1	29.860	29.733	..	60.	56.2	.419	78.	40	..	..	Clear.
21	25.1	758.00	29.743	75.9	29.860	29.733	..	58.8	55.	.400	79.	40	..	..	Clear.
22	25.	758.75	29.749	75.7	29.860	29.734	..	57.5	54.	.389	81.	33	..	..	Clear.
23	24.7	758.60	29.745	75.	29.856	29.731	57.	56.9	53.5	.383	84.	30	..	..	Clear.

Observed dew point: 3h., 48.5°; 9h., 46°; 5; 21h., 52°.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
4	0	24.2	758.35	29.737	74.5	29.840	29.717	55.8	55.6	53.	.365	86.	30	..	..	Clear.
	1	24.	758.25	29.733	74.	29.844	29.722	53.2	56.	52.7	.383	87.2	30	..	..	Clear.
	2	23.9	757.85	29.719	73.6	29.838	29.708	53.8	54.5	52.4	.381	89.	30	..	.3	Few S.
	3	23.8	757.60	29.709	73.3	29.816	29.696	50.5	54.5	52.5	.385	89.	30	..	.1	Cl-s. at Hor.
	4	23.8	757.60	29.709	73.3	29.818	29.698	..	53.	51.5	.378	90.	30	..	.6	Cl-cu.
	5	23.7	757.65	29.713	73.2	29.820	29.700	..	52.7	51.2	.372	91.	30	..	1.0	Cl-cu.
	6	23.3	757.35	29.702	72.7	29.812	29.694	..	56.	51.	.406	90.	30	..	1.0	Cl-cu., Cu.
	7	23.3	758.15	29.733	72.8	29.842	29.724	..	57.	54.5	.407	90.	30	.2	1.0	Cl-cu.
	8	23.4	758.65	29.753	72.	29.868	29.749	..	59.5	57.	.445	87.5	55	1	.9	Cl-s, Cl-cu.
	9	24.	758.85	29.757	73.2	29.870	29.751	..	62.5	59.	.467	85.5	35	..	.5	Cl-s, Cl-cu.
	10	23.7	758.60	29.750	73.2	29.868	29.749	88.5	63.6	59.1	.458	83.3	25	.5	.5	Cl-s, Cl-cu.
	11	23.9	758.30	29.736	73.4	29.850	29.730	..	66.5	60.7	.472	81.	25	.6	.8	Cl-s, Cl-cu., N.
	12	23.7	758.75	29.756	73.5	29.875	29.755	..	63.5	60.	.454	86.7	30	1.0	1.0	Cl-cu, Cl-s, N.
	13	23.8	758.00	29.725	73.7	29.843	29.723	..	62.5	60.7	.518	92.	60	.2	.09	Cl-cu, Cl-s, N.
	14	24.7	756.90	29.678	74.3	29.800	29.677	..	66.1	63.7	.565	90.3	0	.01	.9	Cl., Cu., Cl-cu.
	15	24.8	756.60	29.666	75.	29.785	29.660	..	67.5	64.	.568	87.5	20	.2	.3	Cl., Cu., Cl-cu.
	16	25.	756.20	29.650	75.	29.772	29.647	..	69.8	65.3	.573	84.	15	1	.4	Cl., Cu., Cl-cu.
	17	25.2	755.50	29.632	76.	29.746	29.620	..	69.5	65.5	.584	85.	10	..	.4	Cl., Cu., Cl-cu.
	18	25.3	755.35	29.616	76.	29.740	29.614	..	68.3	64.2	.566	85.	10	..	..	Cl., Cu., Cl-cu.
	19	25.	755.35	29.617	76.	29.740	29.614	..	67.	63.	.534	86.	10	..	..	Cl., Cu., Cl-cu.
	20	24.5	754.70	29.593	75.	29.702	29.580	..	66.5	63.5	.555	86.	10	.2	..	A few Cu.
	21	24.1	754.70	29.594	74.8	29.702	29.577	..	63.	..	..	87.	10	.3	.4	Cu.
	22	23.9	754.80	29.580	74.1	29.706	29.585	..	63.5	60.5	.499	88.6	5	.2	.4	Cu.
23	23.2	754.25	29.581	73.3	29.682	29.564	..	62.5	60.	.495	90.	5	1	1.0	Cl-cu.	

Observed dew point: 3h., 53°; 9h., 56°; 3h., 61°.

MARCH.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saunures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
5	22.8	753.10	29.539	72.3	29.640	29.524	...	62.7	60.5	507	90.	18	...	1.0	Raining.	
1	22.6	752.55	29.519	71.7	29.624	29.511	...	64.4	62.3	541	90.2	15	.6	...	.9 N.	
2	22.3	752.30	29.510	71.3	29.610	29.497	...	64.5	61.	502	87.9	35	2.0	...	.6 Cu., Cu., Ci.s.	
3	...	...	...	...	...	...	...	...	...	...	...	35	1.4	...	...
4	...	...	...	...	...	...	...	...	...	...	...	40	2.0	...	...
5	21.2	751.90	29.500	69.3	29.586	29.478	...	61.7	57.7	441	...	40	2.6	...	.9	Ci-cu., Ci.s., N.
6	20.4	752.50	29.528	68.5	29.624	29.519	...	59.	55.	398	88.	44	4.0	...	.4	Ci-cu.
7	20.2	753.10	29.551	67.7	29.640	29.538	...	59.8	56.8	437	88.5	50	1.9	...	.4	Ci-cu., Ci.s.
8	20.4	753.85	29.580	67.5	29.680	29.578	...	61.5	58.3	459	86.	50	1.2	...	.1	Ci-cu.
9	20.7	754.90	29.619	67.7	29.720	29.616	...	63.7	58.4	438	81.5	75	1.3	...	.9	Ci-cu.
10	20.4	755.80	29.666	67.7	29.756	29.652	...	63.5	57.8	423	80.	95	1.4	...	1.0	Ci-cu., Ci.s.
11	20.5	756.30	29.673	67.7	29.772	29.668	...	65.8	59.1	434	77.3	115	1.0	...	.8	Ci-cu., Cu.
12	20.7	756.80	29.693	68.	29.790	29.685	...	65.6	59.5	448	79.	135	1.2	...	.8	Ci-cu., Cu., Ci.
13	21.	756.85	29.694	68.2	29.796	29.691	93.	64.5	58.7	437	80.	130	1.0	...	.3	Ci-cu., Cu., Ci.
14	21.3	757.70	29.726	68.8	29.828	29.720	92.	64.6	58.6	433	78.5	130	1.0	...	.3	Cu., Ci-cu.
15	21.2	758.00	29.738	69.	29.842	29.734	...	64.7	58.5	430	77.	160	1.	...	.9	Cu., Ci-cu.
16	21.	758.55	29.761	69.	29.858	29.750	...	63.5	57.	400	77.	160	...	...	1.0	Cu., Ci-cu.
17	21.	759.15	29.784	68.8	29.880	29.771	...	63.5	56.5	398	78.	180	...	...	1.0	Cu., Ci-cu.
18	20.7	760.40	29.885	68.5	29.938	29.831	...	57.4	53.4	374	80.	255	1.5	...	1.0	Cu., Ci-cu.
19	20.2	761.35	29.874	67.9	29.964	29.858	...	56.4	51.4	347	80.2	255	1.0	...	1.0	Cu., Ci-cu.
20	18.9	762.80	29.929	65.7	30.020	29.921	...	51.5	48.5	321	81.	205	1.2	...	.5	Cu., Ci-cu.
21	18.9	763.70	29.933	64.8	30.020	29.922	...	51.4	48.2	316	84.	245	1.7	...	.1	A few Cu.
22	17.9	763.10	29.954	64.	30.036	29.941	...	48.5	45.6	288	86.	280	1.0	...	...	A few Cu.
23	...	...	...	...	...	...	...	...	...	...	...	280	1.2	...	...

* Twenty minutes late.

Observed dew point: 9h., 56° 5; 21h., 46° 5.

March.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.	
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.				
7	Hour.																
	0	17.9	762.55	29.932	61.8	30.006	29.916	...	43.	42.5	.282	93.	271	..	.03	1.0	Raining fast.
	1	18.1	761.45	29.889	62.1	29.972	29.880	...	43.5	42.6	.279	91.2	280	..	.01	1.0	N.
	2	19.5	761.40	29.880	63.5	29.962	29.868	...	43.6	43.	.286	91.9	280	..	..	1.0	N.
	3	19.5	761.40	29.880	65.	29.968	29.870	...	43.	42.3	.278	92.	200	..	..	1.0	N.
	4	19.5	761.20	29.872	65.	29.964	29.866	...	43.	42.5	.282	93.	200	..	..	1.0	N.
	5	19.6	761.25	29.874	65.2	29.964	29.866	...	43.	42.4	.280	93.	200	..	..	1.0	N.
	6	19.7	761.35	29.876	65.5	29.964	29.865	...	43.	42.2	.276	93.3	200	..	..	1.0	N.
	7	20.	761.30	29.873	65.8	29.960	29.859	...	43.5	43.	.287	92.5	200	..	..	1.0	N.
	8	19.4	761.90	29.900	65.6	29.968	29.869	...	44.5	43.5	.289	91.	200	..	..	1.0	N.
	9	19.	761.30	29.878	65.	29.970	29.872	...	45.	43.7	.286	90.5	210	..	..	1.0	N.
	10	19.3	761.40	29.881	65.	29.976	29.878	...	46.6	45.	.286	89.	215	..	..	1.0	N.
	11	19.3	762.35	29.918	65.	30.012	29.914	...	47.1	45.	.291	86.5	180	..	..	1.0	N.
	12	20.	762.00	29.900	65.8	30.000	29.899	...	46.9	45.1	.286	88.5	180	..	.05	1.0	N.
	13	20.	761.20	29.869	66.	29.967	29.866	...	46.	44.5	.292	90.	200	.2	.04	1.0	N.
	14	19.2	761.85	29.899	65.6	29.992	29.893	...	43.	41.6	.264	90.5	180	.2	.05	1.0	N.
	15	19.3	762.80	29.936	65.1	30.030	29.932	...	41.6	40.5	.247	91.	180	.5	.07	1.0	N.
	16	19.8	763.20	29.949	65.8	30.040	29.939	...	40.3	39.1	.243	91.	180	.3	.05	1.0	N.
	17	19.3	763.85	29.977	65.5	30.068	29.969	...	39.2	37.	.213	90.5	135	.5	.03	1.0	N.
	18	20.2	765.00	30.017	66.	30.110	30.009	...	38.2	36.5	.215	86.2	135	.6	..	1.0	N.
	19	19.7	765.25	30.030	66.	30.114	30.013	...	38.	36.5	.217	80.	135	?	..	1.0	N.
	20	19.	765.70	30.051	65.	30.128	30.040	...	37.	34.	.180	78.	135	?	..	.2	A few Cu., N.
	21	17.5	766.00	30.070	63.6	30.150	30.056	...	36.	33.5	.182	77.	135	1.5	..	..	Clear.
	22	17.4	767.00	30.109	62.3	30.192	30.101	...	35.2	31.5	.158	76.	180	2.0	..	.2	S.
23	16.9	767.10	30.116	61.3	30.198	30.110	34.	34.5	30.9	.155	74.4	168	1.2	..	..	Clear.	

Observed dew point: 3h., 38° .5; 9h., 42° .7; 15h., 41°; 21h., 26°.

MARCH.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1942.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
8	16.6	767.70	30.141	60.7	30.218	30.132	32.	34.	.153	75.	170	..	..	..	Clear.
9	16.2	767.80	30.145	60.	30.222	30.137	32.3	34.	.162	75.2	182	..	..	..	Clear.
10	15.4	768.40	30.176	58.8	30.250	30.168	32.1	33.5	.155	74.2	132	1.	..	2	A few Cu., Ci-a.
11	16.3	769.20	30.100	64.	30.284	30.187	32.5	33.5	.150	72.	132	1.	..	3	Ci-a.
12	16.3	769.75	30.222	64.2	30.300	30.203	32.5	33.	.138	71.	162	3.	..	2	Ci-a.
13	17.5	770.10	30.230	68.	30.342	30.251	32.5	32.	.132	71.5	142	1.	..	..	Clear.
14	18.	771.50	30.283	61.	30.370	30.287	32.	32.5	.135	72.	142	..	..	..	Clear.
15	17.8	771.70	30.292	61.8	30.384	30.293	..	32.5	.127	71.	142	..	..	..	Clear.
16	19.5	772.90	30.331	62.8	30.424	30.330	..	35.7	.134	68.5	132	..	..	..	Clear.
17	19.5	773.40	30.351	64.1	30.428	30.331	68.	36.5	.152	67.	140	8.	..	..	Clear.
18	18.7	773.90	30.375	64.2	30.440	30.343	64.2	37.5	.136	67.	135	1.3	..	..	Cu.
19	17.8	773.40	30.375	63.	30.444	30.360	..	39.5	.161	66.	130	7.	..	..	A few Cu.
20	17.5	773.10	30.349	62.	30.440	30.349	72.2	40.5	.150	64.	145	8.	..	..	A few Cu., N.
21	18.2	773.55	30.362	62.2	30.456	30.365	76.	42.3	.152	62.5	150	6.	..	..	A few Cu., N.
22	18.8	773.55	30.360	63.	30.456	30.362	78.	44.	.152	59.	145	2.	..	..	A few Cu.
23	18.8	771.75	30.289	63.3	30.382	30.287	82.5	45.4	.158	57.	175	1.	..	..	Clear.
24	18.8	772.30	30.310	63.3	30.406	30.311	78.	46.2	.157	57.3	115	..	..	..	Clear.
25	18.1	772.15	30.304	63.2	30.400	30.306	..	46.7	.172	56.5	70	..	..	..	Clear.
26	18.1	772.95	30.340	63.	30.420	30.326	..	42.5	.195	65.	20	..	..	4	Ci., Ci-a.
27	18.	772.95	30.340	62.5	30.420	30.328	..	42.2	.202	68.	20	..	..	..	Ci-a. at Hor.
28	17.	772.95	30.346	61.2	30.420	30.331	..	40.	.214	71.	20	..	..	..	Clear.
29	16.5	772.30	30.322	60.3	30.382	30.295	..	39.	.196	75.	20	..	..	..	Clear.
30	16.	771.65	30.298	59.7	30.376	30.292	..	38.5	.192	76.	15	..	..	..	Clear.
31	16.9	770.80	30.261	60.1	30.342	30.256	38.2	38.5	.202	79.	360	1.	..	..	Clear.

Observed dew point: 3h., 24°; 9h., 23°; 15h., 25°; 21h., 29°.

MARCH.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
9	0 18.	770.95	30.261	61.1	30.342	30.253	38.2	39.	.206	82.	14	.2	..	..	Clear.
	1 18.3	770.90	30.257	62.7	30.340	30.248	38.5	39.5	.212	85.	21	.5	..	1.0	N.
	2 19.8	770.30	30.227	64.4	30.316	30.218	37.8	38.6	.210	84.4	5	.5	..	1.0	N.
	3 19.2	769.90	30.215	65.	30.282	30.182	..	39.4	.211	83.8	5	1.0	..	1.0	N.
	4 18.8	768.70	30.170	65.3	30.250	30.151	..	40.2	.211	83.	32	.6	..	1.0	N.
	5 18.6	767.90	30.140	65.3	30.222	30.123	..	40.7	.215	82.8	32	.1	..	1.0	N.
	6 18.3	767.35	30.119	65.3	30.210	30.111	..	41.2	.216	82.5	32	.2	..	1.0	N.
	7 16.5	766.35	30.090	63.2	30.168	30.075	..	41.5	.237	83.2	32	.6	..	1.0	N.
	8 15.5	764.70	30.023	60.5	30.100	30.014	..	43.	.209	81.2	30	3.0	..	1.0	N.
	9 17.2	764.25	30.002	61.7	30.090	30.002	..	45.8	.222	77.	30	4.5	..	1.0	N.
	10 17.	764.35	30.008	61.7	30.092	30.004	..	46.5	.241	86.	20	6.5	..	1.0	N.
	11 15.8	763.00	29.959	60.2	30.040	29.955	..	43.	.243	87.5	35	4.7	..	1.0	N.
	12 17.	762.00	29.915	61.	30.000	29.913	..	43.	.277	92.5	35	2.0	..	1.0	N.
	13 17.2	760.80	29.867	62.	29.952	29.862	..	42.6	.260	91.	35	3.0	..	1.0	N.
	14 17.	759.35	29.811	62.	29.900	29.810	..	43.5	.243	87.5	35	2.0	..	1.0	N.
	15 17.8	758.65	29.780	62.3	29.967	29.776	..	44.3	.268	92.5	30	1.0	..	1.0	N.
	16 19.	757.70	29.737	64.	29.832	29.737	..	45.	.265	92.5	25	.8	..	1.0	N.
	17 19.1	756.40	29.655	65.2	29.772	29.674	..	45.4	.299	93.	10	.2	..	1.0	N.
	18 18.7	755.30	29.645	64.7	29.730	29.635	..	46.3	.309	92.5	20	..	..	1.0	N.
	19 18.1	754.50	29.617	64.4	29.688	29.593	..	47.	.315	92.2	20	..	..	1.0	N.
	20 18.	753.70	29.585	63.5	29.664	29.572	..	49.	.338	92.	25	.5	..	1.0	N.
	21 18.	753.50	29.577	63.4	29.650	29.558	..	52.5	.358	89.8	25	2.5	..	1.0	N.
	22 17.8	753.50	29.578	63.	29.654	29.563	..	52.5	.358	89.	45	3.0	..	.5	N.
	23 18.8	753.20	29.561	63.9	29.652	29.558	53.2	52.	.356	87.3	40	2.3	..	..	Clear.

Observed dew point: 3h., 24°; 9h., 31°; 21h., 48°.

Маявн.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1843.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.		Dir., degrees.	Force, lbs.			
10	20.4	753.35	29.561	65.8	29.654	29.555	52.	52.2	354	45	.8	..	..	Clear.
1	21.	753.55	29.565	67.8	29.662	29.558	52.1	52.6	357	48	..	..	..	Clear.
2	21.	753.55	29.565	68.5	29.660	29.555	51.5	52.5	358	60	..	..	..	Clear.
3	21.	753.00	29.543	68.5	29.650	29.545	..	52.5	362	33	..	..	..	1.0 N., very dark.
4	21.	753.70	29.571	68.6	29.670	29.565	..	52.5	367	33	..	..	..	1.0 N., slight rain.
5	21.	754.10	29.587	68.6	29.682	29.577	..	54.	378	33	..	..	..	1.0 N., slight rain.
6	21.4	754.55	29.604	68.8	29.706	29.599	..	55.3	396	33	..	..	..	1.0 N.
7	21.5	755.60	29.645	69.	29.738	29.631	..	56.5	420	30	..	..	..	1.0 N., Ci., S.
8	21.5	756.40	29.674	69.2	29.774	29.665	..	57.5	415	42	..	..	..	1.0 Ci-cu., S.
9	21.7	756.60	29.682	69.5	29.790	29.681	..	59.	446	45	..	..	..	.9 Ci-cu., Ci., W.
10	21.5	756.50	29.678	69.8	29.784	29.674	..	61.6	461	35	..	..	..	.9 Ci-cu., Ci., W.
11	22.	756.55	29.679	70.	29.785	29.675	..	63.6	444	40	.3	..	..	.7 Ci-cu., Ci., W.
12	22.	757.00	29.697	71.	29.792	29.679	..	65.2	416	40	1.7	..	..	1.0 Ci-cu., Ci., W.
13	22.7	756.80	29.684	71.2	29.796	29.683	..	64.5	399	45	2.8	..	..	1.0 Ci-cu., Ci-a., Ci., W.
14	23.	756.85	29.684	72.	29.800	29.684	..	64.	74.	45	2.8	..	..	1.0 Ci-cu., Ci-a., Ci., W.
15	23.	756.90	29.686	72.	29.802	29.686	..	65.1	341	70	1.5	..	..	1.0 Ci-cu., Ci-a., Ci., W.
16	22.9	757.15	29.698	72.	29.812	29.695	..	62.5	396	50	.4	..	..	1.0 Ci-cu., Ci-a., Ci., W.
17	22.5	757.15	29.698	71.5	29.812	29.697	..	62.9	341	55	..	..	..	1.0 Ci-cu., Ci-a., Ci., W.
18	23.	757.65	29.721	71.	29.826	29.712	..	58.	383	55	..	..	..	1.0 Ci-cu., Ci-a., W.
19	21.7	757.50	29.716	70.2	29.820	29.709	..	57.8	382	53	..	..	..	1.0 Cu., Ci-cu., W.
20	20.9	757.20	29.708	69.	29.808	29.699	..	54.5	365	53	..	..	..	.1 Cu.
21	20.6	757.20	29.708	68.2	29.808	29.702	..	54.	378	53	..	..	..	A few Cu.
22	20.	757.45	29.722	67.6	29.810	29.706	..	54.	365	53	..	..	..	A few Cu.
23	..	..	..	..	..	..	..	..	..	53	..	..	..	..

Observed dew point: 3h., 45°; 9h., 56°; 3; 15h., 45°; 4; 21h., 46°; 3.

March.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

[97]

808

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hyg., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.						
11	0	19.	755.70	29.658	65.7	29.744	29.647	52.7	50.	34.3	88.	23	..	..	?
	1	18.7	755.10	29.638	64.9	29.720	29.624	51.5	50.	356	90.	23	..	..	?
	2	18.1	754.60	29.621	64.	29.696	29.602	51.5	50.	356	90.2	23	..	..	?
	3	17.2	752.95	29.660	63.	29.632	29.541	52.5	51.6	384	92.2	345	..	.05	?
	4	17.1	753.10	29.567	62.3	29.640	29.551	51.5	50.5	369	92.	250	..	.01	?
	5	16.8	753.40	29.580	61.6	29.656	29.569	57.	53.5	381	81.	220	..	..	?
	6	15.6	753.80	29.601	59.8	29.670	29.587	41.9	41.	264	89.	220	..	.03	?
	7	14.8	754.00	29.613	58.6	29.674	29.595	42.5	40.5	247	88.	243	..	.05	?
	8	14.3	754.10	29.618	57.1	29.670	29.595	42.5	40.	236	..	220	..	..	Ci-s.
	9	13.	753.60	29.605	56.	29.670	29.597	44.	40.5	230	79.8	236	..	..	Ci-s.
	10	14.	754.00	29.616	55.3	29.688	29.617	45.	40.9	226	76.	225	..	..	Ci-s.
	11	16.2	754.50	29.626	57.5	29.704	29.628	45.8	41.4	229	76.5	155	..	..	Ci-s.
	12	19.	755.25	29.642	61.5	29.733	29.646	49.	44.	248	75.5	185	..	..	Ci, Cu, Ci-cu., Ci-s, W.
	13	21.1	755.05	29.624	65.2	29.728	29.631	51.9	46.2	264	74.7	130	1.2	..	Ci, Cu, Ci-cu., Ci-s, W.
	14	21.3	755.15	29.636	67.7	29.731	29.628	52.4	44.	210	65.	120	3.5	..	Ci, Cu, Ci-cu., (1) WNW.,
	15	21.	756.10	29.665	68.	29.776	29.671	50.7	44.7	244	68.	130	3.0	..	Ci, Cu, Ci-cu., N. [(2) W.
	16	19.5	758.00	29.746	67.	29.842	29.739	43.5	39.	205	75.5	150	5.0	..	Ci, Cu, Ci-cu., W.
	17	18.6	759.00	29.789	65.	29.872	29.774	42.5	38.5	206	71.	120	4.7	..	Ci, Cu, Ci-cu., W.
	18	17.5	761.40	29.869	63.9	29.960	29.865	35.	34.	203	89.	160	3.5	..	Cu, N., snowing, W.
	19	17.3	762.70	29.941	62.2	30.020	29.930	36.5	33.5	176	80.2	140	5	..	Cu, N., W.
	20	17.5	764.00	29.991	61.7	30.070	29.981	36.	32.7	166	75.	160	5	..	Cu, N., W.
	21	17.	764.70	30.022	61.	30.100	30.013	34.8	30.8	150	67.	150	2.0	..	Clear.
	22	15.3	766.20	30.089	59.3	30.152	30.069	31.	37.3	130	70.	170	2.5	..	Clear.
	23	15.	766.85	30.116	59.	30.188	30.109	30.5	27.	131	64.8	150	2.5	..	Clear.

Observed dew point: 9h., 37°; 15h., 36°; 3, 21h., 26°.

MARCH.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Day.	Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
12	0	16.2	767.90	30.152	59.8	30.222	30.137	28.7	30.	25.5	.112	63.5	165	2.5	.	.	Clear.
	1	17.1	769.35	30.204	62.	30.292	30.192	28.2	28.5	24.	.103	64.	148	2.5	.	.	Clear.
	2	18.7	770.00	30.220	63.2	30.318	30.235	27.	27.5	23.	.098	61.5	160	2.0	.	.	Clear.
	*3	18.3	771.00	30.261	63.8	30.350	30.255	25.3	26.	21.	.083	61.5	145	3.0	.	.	Clear.
	4	18.	771.50	30.283	63.2	30.372	30.279	24.	25.5	20.5	.081	63.	140	2.3	.	.	Clear.
	5	17.8	772.65	30.329	62.8	30.416	30.322	23.5	23.8	18.5	.067	64.5	145	2.2	.	.	Clear.
	6	17.5	773.50	30.365	62.2	30.456	30.365	22.5	22.3	17.	.061	67.5	155	1.5	.	.	Clear.
	7	16.	774.45	30.408	60.5	30.512	30.425	.	23.5	19.	.079	65.4	160	4.0	.	.	A few Ci-cu.
	8	15.5	775.50	30.463	59.6	30.576	30.492	.	25.	21.	.093	63.	165	8	.	.	A few Ci-cu.
	9	15.	775.80	30.468	58.5	30.543	30.461	54.	25.5	21.2	.091	61.3	180	1.5	.	.	Ci. in S.
	10	14.	775.20	30.448	57.	30.520	30.442	54.5	25.5	21.5	.096	61.5	190	1.3	.	.	Clear.
	11	13.7	775.25	30.457	55.	30.526	30.454	61.	27.	22.6	.097	62.	180	.7	.	.	Clear.
	12	13.	775.20	30.454	53.6	30.532	30.454	69.5	29.1	24.1	.099	61.7	215	.	.	.	Slight Ci. in S.
	13	15.	775.00	30.436	55.	30.512	30.440	72.	30.2	24.8	.098	61.3	125	.	.	.	Slight Ci. in S.
	14	18.	774.60	30.405	59.7	30.500	30.415	73.	32.5	27.2	.113	60.	110	.	.	.	Clear.
	15	18.	774.30	30.393	61.5	30.490	30.400	70.5	34.8	29.	.119	60.	100	.	.	.	Clear.
	16	17.8	774.10	30.386	61.9	30.478	30.387	70.5	35.9	30.2	.129	59.5	100	.	.	.	Clear.
	17	17.8	773.65	30.369	61.9	30.450	30.369	.	35.5	30.5	.137	58.5	90	.	.	.	Clear.
	18	19.1	773.65	30.364	63.2	30.450	30.366	.	33.4	30.5	.159	65.	10	.	.	.	Clear.
	19	18.	773.30	30.354	63.2	30.430	30.336	.	31.2	29.5	.165	68.	08	.	.	.	Clear.
	20	16.9	772.60	30.332	61.2	30.398	30.309	.	31.	28.5	.150	70.	318	.	.	.	Clear.
	21	16.	772.00	30.312	60.2	30.384	30.298	.	31.	28.8	.156	70.	318	.	.	.	Clear.
	22	14.6	772.40	30.434	57.8	30.396	30.316	.	29.6	27.	.141	....	342	.	.	.	Clear.
	23	....	....	....	....	....	....	....	....	....	....	....	10	.	.	.	Clear.

* Fifteen minutes late.

Observed dew point: 3h., 16°; 15h., 20°; 21h., 22°.

March.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

[97]

910

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hygr., Saunser's.	Wind.		Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.		Dir., degrees.	Force, lbs.		
14	0 15.9	767.30	30.129	53.8	30.208	30.140	...	35.5	.199	140	...	1.0	N.
	1 15.9	767.45	30.135	56.1	30.207	30.133	...	36.1	.210	140	...	1.0	N.
	2 16.3	767.45	30.133	59.1	30.207	30.125	...	35.5	.207	140	...	1.0	N.
	3 16.5	767.60	30.139	59.8	30.212	30.127	...	34.5	.208	140	...	1.0	N.
	4 17.0	767.80	30.144	50.5	30.222	30.136	...	33.5	.203	140	...	1.0	N.
	5 17.8	768.15	30.154	61.	30.230	30.143	...	34.	.193	140	...	1.0	N.
	6 18.2	768.30	30.157	62.	30.234	30.144	...	35.4	.191	140	...	1.0	N.
	7 17.8	768.40	30.161	61.8	30.241	30.154	...	36.	.188	140	...	1.0	N.
	8 17.	768.50	30.172	61.9	30.253	30.170	...	35.	.190	140	...	1.0	N.
	9 17.2	768.65	30.176	61.	30.262	30.175	...	36.5	.163	220	...	1.0	N.
	10 17.8	768.25	30.168	61.3	30.244	30.154	...	41.	.168	220	...	1.0	N.
	11 18.	768.10	30.161	62.	30.244	30.154	...	35.5	.168	220	...	1.0	N.
	12 18.4	767.80	30.137	63.	30.230	30.137	...	36.1	.162	220	...	1.0	N.
	13 18.3	767.30	30.117	63.	30.210	30.117	...	37.1	.165	220	...	1.0	N.
	14 19.8	767.15	30.105	64.3	30.206	30.110	...	38.2	.175	220	...	1.0	N.
	15 20.7	767.00	30.094	66.3	30.200	30.098	...	39.1	.181	220	...	1.0	N.
	16 21.9	767.00	30.088	68.2	30.192	30.086	...	45.5	.181	220	...	1.0	N.
	17 20.9	767.00	30.093	69.	30.199	30.086	...	39.	.187	220	...	1.0	N.
	18 20.7	767.00	30.094	68.	30.194	30.088	...	38.5	.183	220	...	1.0	N.
	19 20.	766.80	30.090	67.	30.188	30.085	...	39.5	.232	220	...	1.0	N.
	20 20.	767.40	30.119	66.2	30.210	30.109	...	42.	.208	220	...	1.0	N.
	21 20.3	767.50	30.116	66.7	30.216	30.114	...	40.5	.208	220	...	1.0	N.
	22 20.6	768.00	30.134	67.2	30.228	30.125	...	37.5	.214	220	...	1.0	N.
	23 19.4	767.50	30.120	66.	30.220	30.119	36.4	37.2	.197	220	...	1.0	N.

* Thirty minutes late.

Observed dew point, 3h., 25°; 9h., 26°; 15h., 32°; 21h., 34° 5.

MARCH.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
15	0 18.8	767.25	30.112	64.8	30.200	30.102	31.2	36.3	34.6	.203	113	..	..	..	Clear.
1	1 18.4	767.25	30.115	64.1	30.200	30.105	30.	35.6	34.	.196	83	..	..	..	Clear.
2	2 18.7	767.00	30.107	63.	30.190	30.097	29.6	34.4	33.1	.192	84	..	.2	..	Clear.
3	3 18.8	766.95	30.101	63.2	30.182	30.089	31.7	34.5	33.6	.199	87.7	..	..	..	Clear.
4	4 19.2	765.50	30.082	64.	30.166	30.071	...	34.5	33.5	.199	88	..	..	..	Clear.
5	5 18.6	766.75	30.095	64.3	30.176	30.080	31.	32.8	32.	.190	91.	..	..	..	Clear.
6	6 18.3	767.00	30.105	64.	30.190	30.095	30.	34.	33.	.196	90.	..	..	..	Clear.
7	7 18.	767.30	30.119	63.	30.200	30.107	...	36.	34.	.191	87.	..	..	..	Clear.
8	8 18.	767.50	30.127	63.	30.212	30.119	...	39.7	35.	.180	80.	..	..	..	Clear.
9	9 18.	767.75	30.137	63.	30.222	30.129	...	41.3	36.7	.182	76.5	..	..	..	Clear.
10	10 18.8	767.35	30.116	63.4	30.206	30.112	83.5	42.8	38.	.191	75.	..	..	..	Clear.
11	11 20.7	767.05	30.099	65.	30.188	30.090	86.	46.5	41.	.211	69.	..	..	..	Clear.
12	12 20.	766.50	30.075	66.2	30.180	30.079	...	51.2	44.4	.231	67.	..	..	..	Clear.
13	13 20.	766.55	30.080	66.8	30.184	30.081	...	45.1	40.4	.214	75.5	..	..	..	Clear.
14	14 19.	765.70	30.051	66.	30.150	30.049	...	41.5	39.	.227	84.	..	..	..	Clear.
15	15 18.3	765.40	30.042	65.3	30.138	30.039	...	42.5	40.	.236	85.	..	..	..	Clear.
16	16 18.9	765.80	30.055	64.5	30.150	30.054	...	45.5	39.5	.192	73.9	..	..	..	Clear.
17	17 18.9	765.80	30.055	64.4	30.152	30.056	...	44.4	40.	.214	74.	..	..	..	Clear.
18	18 19.	766.75	30.093	64.1	30.170	30.075	...	44.	39.5	.209	76.5	..	..	..	Clear.
19	19 18.3	767.35	30.119	63.7	30.204	30.109	...	43.	39.	.209	74.8	..	..	..	Clear.
20	20 17.4	767.90	30.145	62.5	30.225	30.135	...	42.	39.5	.232	74.	..	..	..	Clear.
21	21 16.	768.20	30.164	60.9	30.240	30.153	...	40.8	36.5	.185	71.5	..	..	..	Clear.
22	22 15.4	768.40	30.175	58.8	30.240	30.158	...	36.7	33.6	.176	74.5	..	..	..	Clear.
23	23 15.5	768.70	30.185	58.8	30.250	30.168	31.1	35.6	33.1	.179	76.9	..	..	..	Clear.

Observed dew point: 3h., 29°; 9h., 31°; 15h., 39°; 5h., 21h. 30°.

March.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

[26]

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Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
16	0	15.4	768.70	30.187	58.3	30.250	30.170	29.6	36.4	32.1	.151	70.9	116	..	..	Clear.
	1	16.6	769.00	30.191	58.9	30.268	30.185	35.4	38.7	36.3	.205	62.8	126	.4	..	Clear.
	2	18.4	769.40	30.198	61.3	30.286	30.196	36.1	38.1	34.8	.182	60.5	133	.5	..	Clear.
	3	18.5	769.75	30.211	62.7	30.302	30.210	33.	37.	33.	.166	61.	168	..	..	Clear.
	4	19.2	770.75	30.248	63.8	30.340	30.253	30.	34.3	29.7	.137	64.	145	..	..	Clear.
	5	18.	771.45	30.281	62.5	30.360	30.268	29.5	32.8	28.2	.127	64.	145	..	..	Clear.
	6	17.4	771.90	30.302	62.	30.380	30.289	..	31.7	27.	.119	67.	145	..	..	Clear.
	7	17.8	772.30	30.315	62.	30.406	30.315	..	32.8	28.	.124	68.5	145	..	..	Clear.
	8	17.7	772.60	30.327	62.	30.408	30.317	..	37.	30.5	.123	62.	125	..	..	Clear.
	9	19.	773.10	30.342	63.5	30.440	30.345	71.	39.	36.9	.110	69.	125	.2	..	Clear.
	10	19.2	773.30	30.349	64.2	30.444	30.347	70.5	40.1	32.	.107	67.	140	.2	.1	Ci., NW.
	11	19.6	773.15	30.340	65.	30.437	30.337	77.	42.	34.	.123	65.5	140	.1	.7	Ci., NW.
	12	19.7	772.55	30.316	65.	30.418	30.318	..	44.5	35.2	.117	54.7	105	.1	.9	Slight Ci., NW.
	13	19.7	771.50	30.275	65.	30.376	30.276	..	48.	38.5	.143	54.5	40	.2	.9	Slight Ci., NW.
	14	19.7	770.70	30.243	65.	30.350	30.250	..	49.	39.	.141	53.	100	.1	.8	Ci., Ci-cu., NW.
	15	19.7	770.25	30.225	65.2	30.330	30.230	..	50.5	40.5	.155	64.	75	.1	..	Ci., Ci-s, NW.
	16	19.2	769.70	30.207	65.2	30.304	30.204	..	49.6	40.6	.167	66.	30	.5	1.0	Ci., Ci-s, Ci-cu., NW.
	17	18.7	769.00	30.181	64.7	30.268	30.170	..	45.4	43.	.220	60.	20	1.5	1.0	Ci., Ci-s, Ci-cu., NW.
	18	18.2	769.00	30.182	64.	30.268	30.171	..	49.5	40.5	.212	65.	20	.7	1.0	Ci., Ci-s, Ci-cu., NW.
	19	18.	769.00	30.184	63.5	30.268	30.178	..	43.5	39.5	.214	69.	20	..	.2	Ci., Ci-s, NW.
	20	17.4	768.65	30.174	62.6	30.253	30.161	40.	41.8	38.	.203	73.	20	..	..	A few Ci-s.
	21	17.	768.25	30.162	61.5	30.234	30.146	44.4	40.6	38.1	.219	74.5	20	..	..	Clear.
	22	16.7	767.80	30.145	61.1	30.218	30.131	38.3	40.6	35.7	.171	74.8	15	..	..	Clear.
	23	18.	767.20	30.116	62.	30.200	30.110	47.3	39.1	36.	.195	76.2	13	..	..	Clear.

Observed dew point: 3h., 30°; 21h., 33° 2.

Date.		Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
17	0	18.5	766.40	30.081	63.3	30.160	30.066	36.6	39.2	36.4	13				Clear.	
	1	18.2	765.60	30.050	63.3	30.132	30.038	36.3	40.4	37.8	12	1			Clear.	
	2	18.1	765.00	30.028	63.8	30.100	30.005	38.	39.5	37.2	16	7			Clear.	
	3	18.5	764.10	29.990	63.3	30.080	29.998	37.5	39.4	37.	21				Clear.	
	4	17.4	763.85	29.985	62.5	30.065	29.974	37.	39.5	37.3	27				Clear.	
	5	16.5	763.25	29.967	60.5	30.045	29.959	38.	40.	39.	23				Clear.	
	6	15.7	762.75	29.951	60.	30.028	29.943	38.5	40.	38.	30	1		1.0	Ci-s.	
	7	16.	762.75	29.949	59.8	30.030	29.945	...	41.8	38.5		30	1	1.0	Ci-s.	
	8	17.2	762.75	29.943	60.5	30.024	29.938	...	45.	40.		50	5	1.0	Ci-s.	
	9	18.2	762.55	29.930	62.	30.024	29.934	...	48.	43.		40	1.3	1.0	Ci, Ci-s.	
	10	18.6	762.15	29.909	63.6	30.007	29.913	...	51.5	45.		74	2.0	1.0	Ci, Ci-s.	
	11	19.	761.40	29.882	64.2	29.977	29.882	...	54.9	46.7		70	2.3	1.0	Ci-s.	
	12	19.2	760.65	29.852	65.	29.950	29.852	...	58.3	49.			2.5	1.0	Ci-s, W.	
	13	19.1	759.90	29.822	65.	29.920	29.822	...	57.4	48.3			2.8	1.0	Ci-s, Ci-cu, W.	
	14	18.9	758.75	29.778	65.	29.874	29.776	...	60.3	50.5			3.0	1.0	Ci-s, W.	
	15	19.9	758.60	29.767	65.3	29.866	29.767	...	60.	52.7			2.5	1.0	Ci-s, Ci-cu, W.	
	16	20.2	758.00	29.742	66.8	29.843	29.740	...	60.8	53.4			2.3	1.0	Ci-s, Ci-cu, W.	
	17	20.8	758.00	29.739	67.5	29.843	29.739	...	59.5	54.5			2.3	1.0	Ci, Ci-s, Ci-cu, W.	
	18	21.3	758.10	29.741	68.3	29.848	29.741	...	59.	53.			2.0	1.0	Ci, Ci-s, W.	
	19	23.	758.55	29.751	70.	29.864	29.753	...	58.9	52.8			2.5	1.0	Ci, Ci-s.	
	20	23.3	760.00	29.806	71.4	29.920	29.805	...	57.	51.8			1	1.0	Ci, Ci-s.	
	21	23.	760.20	29.816	71.9	29.932	29.815	...	57.	49.7				1.0	Clear.	
	22	22.1	760.85	29.847	71.	29.944	29.830	52.4	57.	52.8				1.0	Clear.	
23	22.	761.50	29.872	70.7	29.970	29.858	59.	62.4	52.2			1.2	1.0	Clear.		

Observed dew point : 3h., 38°; 9h., 38°; 21h., 43° 6.

March.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gausser's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
18	0	21.2	762.20	29.903	69.5	29.990	29.980	55.4	58.5	49.	.255	61.7	136	.3	...	...	Clear.
	1	21.2	763.25	29.914	69.	30.034	29.925	54.	56.7	47.2	.231	60.8	150	.3	...	...	Clear.
	2	21.7	763.75	29.961	69.5	30.050	29.940	52.3	55.5	47.	.240	60.	135	.2	...	...	Cl-a.
	3	23.2	764.75	29.993	70.9	30.100	29.986	50.6	53.8	45.	.214	60.	145	.2	...	...	Cl-a. near Hor.
	4	23.	765.20	30.012	71.5	30.138	30.023	46.4	52.	43.8	.199	60.	140	...	...	...	Cl-cu., Cl.
	5	23.4	766.55	30.084	72.	30.170	30.053	45.3	50.7	42.2	.188	60.	135	...	...	...	Cl-a.
	6	23.5	767.25	30.090	72.8	30.208	30.089	42.8	48.	39.7	.167	61.	130	...	...	...	Cl., Cl-a.
	7	23.3	767.50	30.101	72.5	30.216	30.098	...	49.5	40.3	.162	58.5	120	...	...	...	Cl., Cl-cu.
	8	22.3	768.30	30.138	71.	30.254	30.140	...	52.	41.7	.164	57.	130	...	...	...	Cl.
	9	22.3	768.75	30.155	70.7	30.270	30.157	83.5	53.	42.	.158	56.7	145	...	...	...	Cl. in S.
	10	22.8	768.80	30.155	71.	30.270	30.155	89.	53.7	42.1	.152	55.5	145	...	...	...	Cl. in S.
	11	23.	768.65	30.148	71.1	30.263	30.148	91.	54.5	43.	.162	54.5	125	...	...	...	Cl. in S.
	12	23.4	768.50	30.142	71.5	30.256	30.140	84.	56.3	44.3	.170	53.	145	.3	...	...	Cl., Cl-cu.
	13	23.2	768.05	30.123	71.7	30.236	30.120	94.	57.8	45.	.168	51.	145	1.	...	...	Cl., Cl-cu.
	14	23.	767.60	30.106	72.	30.222	30.104	...	59.6	45.3	.155	50.5	120	...	...	...	Cl., Cl-cu., WNW.
	15	22.8	767.30	30.095	71.7	30.203	30.092	...	61.5	47.5	.183	50.	150	...	...	...	Cl., Cl-cu., WNW.
	16	22.7	767.10	30.087	71.3	30.200	30.084	...	61.7	47.7	.185	51.	70	...	...	...	Cl., Cl-cu., WNW.
	17	23.8	767.10	30.087	71.5	30.200	30.084	...	59.8	...	...	59.2	40	...	...	...	Cl., Cl-cu., WNW.
	18	22.2	766.80	30.079	71.	30.188	30.074	...	56.3	49.	.278	61.8	310	...	...	...	Cl., Cl-cu., WNW.
	19	22.	766.80	30.081	70.7	30.188	30.076	...	54.	46.	.235	64.	300	...	...	...	Cl., Cl-cu.
	20	21.8	766.80	30.082	69.9	30.188	30.077	...	52.5	45.	.229	65.	320	1.	...	...	Cl., Cl-cu.
	21	21.2	766.50	30.073	69.2	30.176	30.067	...	51.	45.	.246	67.	275	.2	...	...	Cl., N., rain.
	22	21.1	766.40	30.069	68.8	30.150	30.041	...	49.2	44.5	.255	73.3	230	...	...	...	N., rain.
	23	20.9	768.65	30.159	68.6	30.268	30.161	...	56.4	54.	.401	83.2	178	.2	.02	...	N., rain.

Observed dew point: 3h., 35°.8; 21h., 34°.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Old height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
19	0	767.00	30.093	68.6	30.108	30.001	...	50.3	47.2	.304	268	.1	.23	1.0	N.
	1	766.50	30.074	68.6	30.150	30.043	...	46.5	40.3	.207	309	.5	...	1.0	N. Cu.
	2	765.65	30.046	67.1	30.124	30.021	...	44.2	39.1	.198	313	.6	...	.6	N. Cu.
	3	765.15	30.023	64.8	30.116	30.019	...	43.5	38.	.183	313	...	...	.6	N. Cu.
	4	765.00	30.014	67.	30.098	29.995	...	42.	37.	.181	313	...	...	.6	N. Cu.
	5	765.30	30.025	68.	30.120	30.014	...	45.	40.	.207	313	...	...	1.0	N.
	6	764.80	30.008	67.	30.102	29.999	...	42.	41.	.268	313	...	...	1.0	N.
	7	764.70	29.999	66.5	30.102	30.010	...	42.5	47.	.272	310	...	...	1.0	N. Cu.
	8	764.65	29.998	66.2	30.102	30.001	...	45.5	43.8	.263	310	...	...	.6	Cl., Cl-a., Cu.
	9	764.10	29.983	66.	30.083	29.982	...	48.9	46.9	.314	45	...	...	.6	Cl., Cl-a., Cu.
	10	763.60	29.958	66.5	30.060	29.958	...	51.5	49.	.333	15	...	...	.5	Cl-cu., Cl-a.
	11	763.10	29.942	67.	30.043	29.940	79.	53.5	50.7	.351	15	...	...	.3	Cl-a.
	12	762.15	29.903	67.7	30.004	29.900	81.	57.4	53.6	.379	55	.2	...	.2	Cl-a.
	13	761.40	29.872	68.1	29.980	29.874	78.5	60.6	56.5	.419	25	.1	...	.3	Cl-a., Cl.
	14	760.80	29.846	69.	29.953	29.844	82.	64.3	59.	.447	35	.2	...	.7	Cl-a., Cl.
	15	760.00	29.813	70.	29.920	29.809	82.	68.2	62.2	.456	35	...	...	.7	Cl-a., Cl.
	16	759.90	29.807	70.4	29.916	29.804	83.	69.3	62.6	.495	45	...	...	.7	Cl-a., Cl.
	17	760.10	29.813	71.3	29.922	29.807	...	68.	63.5	.566	50	...	...	1.0	Cl-a., Cl.
	18	760.70	29.836	71.9	29.948	29.831	...	67.5	62.	.497	50	...	...	.8	Cl-a., Cl.
	19	760.80	29.836	72.	29.952	29.835	...	64.2	60.5	.491	330	...	...	.9	Cl-a., Cl.
	20	761.00	29.847	71.9	29.960	29.843	...	62.	59.	.472	385	...	...	...	Clear.
	21	761.00	29.849	71.5	29.960	29.845	...	59.	57.	.461	390	...	...	...	Clear.
	22	760.85	29.848	70.8	29.940	29.836	...	56.5	54.8	.430	343	...	...	...	...
	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Observed dew point: 3h., 29° 5; 9h., 45° 8; 15h., 56°; 21h., 52°.

March.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

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Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, F.h.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.							
21	0	761.35	29.891	61.5	29.968	29.880	...	49.2	46.1	.292	78.	198	.2	1.0	N.	N.
	1	762.10	29.920	60.9	29.990	29.903	...	47.4	45.4	.296	72.2	190	1.5	1.0	N.	N., Cu., Ci-s.
	2	762.75	29.940	61.5	30.020	29.932	...	47.	44.4	.278	72.	178	.2	1.0	N.	N., Cu., Ci-s.
	3	763.00	29.942	63.3	30.030	29.936	...	47.	40.7	.199	72.	190	.1	1.0	N.	N.
	4	764.00	29.976	65.8	30.080	29.979	...	46.7	39.4	.176	67.	200	.1	1.0	N.	N.
	5	764.40	29.992	66.4	30.084	29.982	...	46.5	39.	.170	67.	225	.3	1.0	N.	N.
	6	765.50	30.042	65.5	30.132	30.033	...	38.5	33.	.144	69.	250	4.0	1.0	Ci-cu., Ci-s.	Ci-cu., Ci-s.
	7	766.20	30.071	64.3	30.160	30.064	...	37.2	32.	.140	71.	250	2.5	.8	Ci-cu.	N., Ci-cu.
	8	766.75	30.095	64.	30.182	30.087	...	36.4	31.4	.144	71.	240	1.5	1.0	N., Ci-cu.	N., slight rain.
	9	766.75	30.098	63.	30.186	30.093	...	36.1	30.1	.125	67.5	210	1.2	1.0	N.	N.
	10	766.75	30.103	62.	30.186	30.096	...	36.7	31.2	.139	69.3	230	1.0	1.0	N.	N.
	11	767.00	30.107	62.	30.200	30.110	...	37.	31.1	.133	68.7	225	.2	1.0	N.	WNW
	12	766.90	30.101	63.	30.194	30.101	...	37.	31.1	.133	68.7	240	.3	1.0	N.	Ci-s., WNW.
	13	766.60	30.092	63.	30.182	30.089	...	37.9	32.2	.136	68.3	240	..	1.0	N.	Ci-s.
	14	766.05	30.068	63.	30.160	30.087	...	37.	32.2	.146	72.5	260	.1	1.0	Rain, N.	Rain, N., Ci-cu., Ci-s., WNW.
	15	765.70	30.056	63.	30.150	30.057	...	36.5	32.6	.160	76.3	250	.3	1.0	Ci-s., N.	Ci-s., N.
	16	765.55	30.051	62.5	30.148	30.051	...	35.6	32.6	.169	78.	250	.2	1.0	N., rain.	N., rain.
	17	765.40	30.045	62.2	30.136	30.046	...	33.5	32.	.182	91.	260	.1	1.0	N., rain.	N., rain.
	18	765.80	30.065	61.3	30.160	30.062	...	33.	32.	.188	91.	230	..	1.0	N., rain.	N., rain.
	19	765.25	30.046	60.5	30.126	30.040	...	32.5	32.	.193	92.	230	..	1.0	N., rain.	N., rain.
	20	765.00	30.034	60.	30.114	30.029	...	33.5	32.8	.197	93.	250	..	1.0	N., rain.	N., rain.
	21	765.00	30.032	60.7	30.114	30.028	...	33.5	32.8	.197	...	250	..	1.0	N., rain.	N., rain.
	22	764.75	30.022	60.9	30.098	30.001	...	33.7	33.1	.200	94.	235	..	1.0	N., rain.	N., rain.
	23	764.00	29.991	61.4	30.070	29.982	...	33.8	33.1	.199	95.4	249	..	1.0	N., rain.	N., rain.

Observed dew point: 3h., 37°.5; 9h., 20°; 15h., 26°.8.

MARCH.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
22	0	17.3	763.15	29.958	61.2	30.036	29.949	....	34.	33.4	.203	95.	...	.02	1.0	N., rain.
	1	17.9	762.60	29.934	61.9	30.010	29.920	....	34.8	34.1	.207	94.1	...	.01	1.0	N., rain.
	2	18.3	762.15	29.914	62.8	29.990	29.897	....	35.	34.3	.208	94.5	...	.02	1.0	N., rain.
	3	18.8	760.60	29.851	63.8	29.944	29.849	....	34.8	34.	.205	95.	...	.01	1.0	N., slight rain.
	4	18.2	760.65	29.856	64.3	29.946	29.850	....	35.	34.5	.212	95.	...	.03	1.0	N., slight rain.
	5	18.3	760.45	29.848	64.5	29.932	29.836	....	35.3	35.	.219	94.6	...	.07	1.0	N., rain.
	6	19.3	761.00	29.864	64.7	29.956	29.860	....	36.2	35.2	.212	94.	...	.02	1.0	N., rain.
	7	18.7	761.25	29.878	64.5	29.972	29.876	....	36.	35.5	.220	93.	...	.01	1.0	N., rain.
	8	18.3	761.60	29.893	63.5	29.976	29.882	....	36.8	36.	.221	93.	...	...	1.0	N., rain.
	9	18.2	761.70	29.897	63.5	29.980	29.886	....	37.5	36.4	.221	92.4	...	...	1.0	N., rain.
	10	18.7	762.00	29.907	64.	29.990	29.895	....	38.1	37.	.226	90.	...	...	1.0	N., Ci-s.
	11	18.8	761.80	29.899	64.5	29.993	29.897	....	38.6	37.3	.225	89.7	...	...	1.0	N., Ci-s.
	12	18.3	761.70	29.897	63.9	29.987	29.891	....	38.8	37.7	.232	90.	...	...	1.0	N., Ci-s.
	13	18.	761.60	29.895	62.5	29.984	29.889	....	39.	37.3	.221	88.	...	...	1.0	N., Ci-s.
	14	17.	761.60	29.900	62.	29.983	29.892	....	38.6	37.1	.222	88.	...	...	1.0	N., Ci-s.
	15	17.2	762.05	29.915	62.	30.006	29.916	....	38.4	36.7	.216	88.	...	...	1.0	N., drizzling rain.
	16	17.7	762.40	29.927	63.2	30.017	29.927	....	37.8	36.4	.217	89.3	...	.02	1.0	N.
	17	18.9	763.00	29.944	63.7	30.038	29.945	....	37.4	36.5	.224	88.2	...	...	1.0	N.
	18	18.1	763.80	29.981	63.7	30.066	29.975	....	38.	36.	.207	86.2	...	...	1.0	N., Ci-s.
	19	18.4	764.10	29.991	63.7	30.076	29.982	....	38.	36.5	.217	86.	...	...	1.0	N., Ci-s.
	20	17.8	764.70	30.018	63.	30.100	30.007	....	38.	36.	.207	87.1	...	...	1.0	N., Cu.
	21	17.8	764.90	30.026	62.8	30.106	30.013	....	38.	36.	.207	86.	...	...	1.0	N., Cu.
	22	17.	765.00	30.033	61.9	30.114	30.024	....	37.	35.5	.210	90.	...	...	1.0	N., Ci-s.
23	16.1	765.00	30.037	60.6	30.114	30.028	....	36.3	35.3	.213	91.3	...	...	1.0	N., Ci-s.	

Observed dew point: 3h., 33° 5; 9h., 34° 6; 15h., 35° 3; 21h., 33° 5.

[Aug.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

818

Day.	Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
23	0	16.3	765.00	30.037	59.9	30.114	30.029	...	36.4	35.4	.214	190	..	..	1.0	N. Ci-s.
	1	16.3	765.50	30.056	59.5	30.134	30.051	...	34.7	33.	.188	210	..	..	1.0	N. Ci-s.
	2	16.5	765.75	30.066	60.	30.138	30.053	...	34.	32.	.176	210	.5	..	1.0	N. Ci-s.
	3	16.7	765.85	30.068	60.5	30.144	30.058	...	33.8	32.	.179	210	.4	..	1.0	N. Ci-s.
	4	17.6	766.10	30.074	63.	30.158	30.065	...	32.8	30.	.158	240	.2	..	1.0	N. Ci-s.
	5	16.4	766.50	30.096	60.3	30.164	30.078	...	32.6	30.	.160	240	.3	..	1.0	N. Ci-s.
	6	14.5	767.45	30.137	58.5	30.210	30.130	...	32.5	30.	.161	240	..	..	1.0	N.
	7	13.4	767.80	30.160	57.4	30.222	30.145	...	33.	30.5	.164	240	..	..	1.0	N.
	8	16.7	768.30	30.165	56.3	30.252	30.177	...	33.5	30.5	.159	240	..	..	1.0	N.
	9	18.	768.85	30.172	59.8	30.264	30.178	...	34.5	31.	.156	245	.2	..	.9	Cu, Ci-cu, N.
	10	18.	768.80	30.178	61.2	30.270	30.181	...	36.1	32.1	.154	240	.2	..	.9	Cu, Ci, Ci-cu, N.
	11	19.	768.65	30.167	63.	30.265	30.171	...	38.7	34.6	.172	250	.2	..	.9	Cu, Ci, Ci-cu, N.
	12	20.	768.60	30.160	65.	30.264	30.164	...	40.5	36.5	.188	225	.1	..	.9	Cu, Ci, Ci-cu, N.
	13	19.5	768.45	30.157	65.2	30.258	30.158	...	41.	36.	.173	235	..	..	1.0	Cu, Ci, Ci-cu, N.
	14	19.	768.00	30.141	65.	30.240	30.140	...	41.	36.5	.183	210	..	..	1.0	Cu, Ci-cu, N.
	15	19.3	768.00	30.140	65.1	30.238	30.138	...	41.5	36.7	.180	210	..	..	1.0	Cu, Ci-cu, N.
	16	19.2	767.90	30.136	65.2	30.230	30.130	...	41.2	37.2	.194	135	..	..	1.0	Cu, Ci-cu, N.
	17	19.3	768.00	30.140	65.3	30.233	30.132	...	40.3	36.	.181	135	..	..	1.0	Cu, Ci-cu, N.
	18	18.9	768.00	30.142	64.7	30.233	30.135	...	40.	36.4	.192	135	..	..	1.0	Cu, Ci-cu, N.
	19	17.3	768.30	30.162	63.	30.246	30.162	...	39.5	35.	.182	300	.1	..	1.0	Cu.
	20	17.6	769.00	30.188	61.3	30.276	30.186	...	37.5	34.5	.184	310	..	..	1.0	Cu, Ci-s.
	21	17.6	769.35	30.202	61.5	30.290	30.200	...	37.	34.5	.190	335	..	..	1.0	Cu, Ci-s.
	22	18.3	769.20	30.192	62.5	30.284	30.193	...	36.	33.1	.174	340	..	..	1.0	Cu, Ci-cu, Ci-s.
	23	18.8	769.30	30.193	63.6	30.286	30.192	...	35.2	32.8	.178	350	..	..	.9	Cu, Ci-cu.

Observed dew point: 9h., 26°.4; 15h., 39°.6; 21h., 26°.7.

March.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Sausure's.	Wind.		Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimètres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.		
24	0 19.1	769.35	30.194	64.6	30.286	30.188	...	33.5	.181	76.	350	...	.4	Cu., Ci-cu., NW.
	1 19.2	769.50	30.200	65.	30.298	30.188	...	35.	.198	77.5	350	...	.5	Cu., Ci-cu., NW.
	2 19.4	769.20	30.187	65.2	30.280	30.180	...	35.5	.173	76.3	350	...	.3	Ci-s.
	3 18.8	769.50	30.200	65.5	30.300	30.199	...	35.7	.185	77.5	350	...	.8	Ci-s.
	4 18.7	769.65	30.202	65.5	30.302	30.201	...	35.	.174	78.	350	...	1.0	N, Ci s.
	5 19.7	769.55	30.198	65.2	30.302	30.202	...	34.5	.170	80.	350	...	1.0	Ci-s.
	6 19.8	770.15	30.221	66.	30.324	30.224	...	34.5	.180	80.5	350	...	1.0	Ci s.
	7 18.5	770.50	30.240	65.	30.330	30.230	...	35.5	.178	80.	350	...	1.0	Ci s.
	8 17.7	770.40	30.240	63.8	30.324	30.227	...	37.5	.183	79.	350	...	1.0	Ci-s.
	9 17.3	770.40	30.243	62.	30.334	30.243	...	39.5	.191	78.	340	...	1.0	Ci-s, Ci-cu.
	10 18.	770.35	30.237	62.3	30.332	30.240	...	41.8	.189	74.	340	...	1.0	Ci-s, Ci-cu.
	11 19.2	770.20	30.226	64.	30.328	30.231	...	43.5	.197	72.5	340	...	1.0	Ci-s, Ci-cu.
	12 19.7	769.80	30.208	65.	30.308	30.208	...	44.5	.194	72.	340	...	1.0	Ci-s, Ci-cu.
	13 19.2	769.40	30.195	65.2	30.292	30.192	...	44.5	.192	71.	330	...	1.0	Ci-s.
	14 19.9	769.00	30.175	66.	30.275	30.173	...	44.	.198	70.3	300	...	1.0	N, Ci-s.
	15 20.1	768.40	30.151	66.5	30.252	30.149	...	44.6	.191	70.	285	...	1.0	N, Ci-s.
	16 20.1	768.50	30.155	67.	30.258	30.153	...	41.7	.188	70.6	310	...	1.0	N, Ci-s.
	17 19.	768.00	30.143	66.	30.238	30.137	...	41.	.173	74.	335	...	1.0	N, Ci-s.
	18 17.9	767.40	30.123	64.5	30.200	30.104	...	39.4	.191	75.	315	...	1.0	N, Ci-s.
	19 17.3	767.55	30.136	63.2	30.218	30.125	...	38.3	.187	79.5	310	...	1.0	N, raining hard.
	20 16.5	766.90	30.112	61.3	30.188	30.100	...	37.7	.218	89.	285	...	1.0	N, raining hard.
	21 16.2	766.50	30.096	60.7	30.174	30.088	...	36.5	.215	91.2	265	...	1.0	N, raining hard.
	22 16.9	766.20	30.081	60.5	30.160	30.074	...	36.6	.223	93.	266	...	1.0	N, raining hard.
	23 17.2	766.00	30.071	61.	30.150	30.063	...	37.	.220	93.	271	...	1.0	N.

Observed dew point: 9h., 33° 5; 15h., 28° 7; 21h., 33°.

March.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1843.]

[97]

920

Date.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, condirade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
25	0	17.2	765.00	30.031	61.7	30.124	30.036	....	37.	36.	.219	94.	236	..	.01	1.0	N., rain.
	1	17.5	764.65	30.017	61.8	30.100	30.011	....	37.2	36.7	.229	94.	241	..	.04	1.0	N., rain.
	2	17.6	764.00	29.991	62.	30.064	29.974	....	37.7	37.1	.232	94.	253	..	.08	1.0	N., rain.
	3	17.5	762.00	29.912	62.	29.999	29.909	....	39.	38.5	.245	93.5	268	.2	.02	1.0	N., rain.
	4	17.7	761.40	29.889	61.7	29.972	29.884	....	40.	39.3	.250	93.	270	.1	..	1.0	N., rain.
	5	19.4	760.45	29.843	62.2	29.932	29.842	....	39.	38.4	.243	92.5	270	.1	..	1.0	N., rain.
	6	18.8	759.90	29.825	63.5	29.900	29.812	....	40.5	40.	.258	94.	270	.4	..	1.0	N., rain.
	7	17.6	760.00	29.834	63.	29.922	29.839	....	41.	40.5	.263	92.5	260	.3	..	1.0	N., rain.
	8	16.5	759.65	29.826	61.8	29.900	29.810	....	41.	40.	.253	92.5	260	.4	.02	1.0	N., rain.
	9	15.7	759.10	29.808	60.	29.892	29.808	....	41.2	40.5	.261	92.	260	.8	.09	1.0	N., rain.
	10	15.3	758.10	29.771	59.	29.852	29.771	....	41.6	40.6	.259	92.	245	.3	.02	1.0	N., rain.
	11	16.7	757.60	29.745	59.7	29.832	29.750	....	41.2	40.5	.261	92.	250	1.0	.05	1.0	N.
	12	18.	756.40	29.691	61.5	29.783	29.695	....	41.6	40.9	.265	92.3	250	1.7	..	1.0	N.
	13	19.	756.40	29.686	63.7	29.780	29.687	....	42.5	41.7	.272	92.5	250	1.3	..	1.0	N.
	14	19.	755.40	29.647	64.3	29.742	29.647	....	43.	42.5	.282	93.	250	.6	..	1.0	N., S.
	15	18.	754.55	29.619	64.	29.710	29.616	....	42.7	42.	.275	92.	240	1.3	..	1.0	N., S.
	16	18.3	756.60	29.698	63.7	29.792	29.699	....	42.5	41.5	.268	91.7	170	1.0	..	1.0	N., S.
	17	19.	755.10	29.635	64.	29.734	29.610	....	41.1	40.5	.262	92.3	230	.7	.01	1.0	N., thunder.
	18	19.1	764.85	29.626	64.8	29.720	29.624	....	39.5	38.7	.249	92.5	235	.6	.06	1.0	N., thunder, raining.
	19	18.4	755.15	29.641	64.2	29.728	29.634	....	39.5	38.7	.244	91.5	200	.5	.02	1.0	N., rain stopped.
	20	18.1	757.15	29.720	63.3	29.804	29.710	....	39.8	38.5	.236	90.	170	.2	..	1.0	N.
	21	18.4	757.00	29.712	63.2	29.800	29.707	....	39.5	37.3	.215	89.	185	..	..	1.0	N.
	22	18.9	757.10	29.713	63.8	29.894	29.699	....	39.6	38.7	.243	89.1	202	..	..	1.0	N., Ci-s.
	23	19.4	757.40	29.723	64.8	29.814	29.716	....	39.8	37.7	.221	88.4	201	..	..	1.0	N., Ci-s.

Observed dew point: 3h., 38°; 9h., 38°; 8; 15h., 40°; 7; 21h., 33°; 2.

MARCH.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr. Gauges.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
26	19.8	758.00	29.745	65.5	29.830	29.731	...	40.	38.6	.236	89.	201	..	1.0	N.
	20.	757.55	29.724	66.1	29.822	29.721	...	40.2	39.	.242	89.	184	..	.9	N., Ci. s.
	20.2	757.70	29.731	66.8	29.824	29.721	...	40.5	39.5	.249	91.5	77	..	1.0	N., Ci. s.
	20.2	757.70	29.731	66.5	29.828	29.726	...	41.	40.	.253	92.	85	..	1.0	N., Ci. s.
	20	757.80	29.736	66.	29.836	29.735	...	41.	39.5	.243	92.	100	..	1.0	N., Ci. s.
	18.5	757.95	29.749	64.5	29.844	29.748	...	41.	39.	.232	92.	110	..	1.0	N., Ci. s.
	17.8	758.00	29.754	63.2	29.850	29.757	...	41.	38.	.212	92.	120	..	1.0	N., Ci. s.
	17.	758.85	29.792	62.	29.865	29.776	...	43.	40.	.280	91.	120	..	1.0	N., Ci. s.
	18.5	759.25	29.799	62.8	29.890	29.797	...	45.6	42.6	.255	89.	120	.4	1.0	Cu., Ci. cu.
	20	759.70	29.810	65.	29.913	29.815	...	46.5	41.6	.225	75.	120	1.5	1.0	Cu., Ci. cu., Ci. s.
	19.5	760.45	29.843	65.6	29.940	29.841	...	46.2	40.7	.208	71.7	120	3.2	1.0	Cu., Ci. cu., Ci. s.
	18.7	760.85	29.863	65.	29.958	29.860	...	46.2	40.5	.205	70.	120	3.2	.9	Cu., Ci. cu.
	17.	760.70	29.865	63.	29.952	29.859	...	48.	42.2	.220	68.5	120	5.5	.9	Cu., Ci. cu.
	17.9	761.15	29.878	62.7	29.980	29.869	...	47.5	42.	.221	67.8	130	4.0	1.0	Cu.
	19.7	761.90	29.919	64.6	29.996	29.901	...	46.5	42.9	.253	68.9	130	4.3	1.0	Cu., N.
	20.1	763.00	29.939	66.2	30.036	29.935	...	45.5	42.	.244	68.	130	2.3	1.0	Cu., N.
	19.1	763.50	29.963	66.2	30.066	29.965	...	43.5	39.5	.215	68.5	130	3.5	1.0	Cu., N.
	18.	764.30	30.001	64.8	30.098	29.900	...	43.2	39.	.208	68.	130	3.5	1.0	Cu.
	17.	765.10	30.037	62.5	30.118	30.027	...	42.9	38.5	.202	68.	130	2.3	1.0	Cu.
	17.	765.10	30.037	62.5	30.132	30.044	...	42.5	38.4	.204	68.7	110	.2	1.0	Cu.
	16.3	765.40	30.052	61.3	30.150	30.070	...	41.4	37.2	.192	69.	135	1.0	..	Clear.
	20	765.80	30.076	58.7	30.148	30.072	...	40.7	37.6	.208	69.8	135	2.0	..	Clear.
	21	766.35	30.099	57.2	30.160	30.084	...	40.6	37.4	.205	69.	125	2.0	..	Clear.
	22	766.45	30.102	57.	...	...	...	...	...	...	...	125	1.3	..	Clear.
	23	...	...	...	...	...	...	...	...	...	...	...	...	..	...

Observed dew point: 3h., 38°; 9h., 37°; 21h., 26° 5.

Marca.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gausse's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
28	0	13.	760.40	29.872	53.8	29.916	29.848	...	49.8	43.4	.325	69.6	.2	..	.2	Cu., Ci-cu., W.
	1	15.7	760.00	29.843	55.9	29.912	29.838	...	43.9	38.8	.195	83.8	..	..	.1	Ci-cu.
	2	18.8	760.35	29.841	60.7	29.932	29.846	...	52.	42.2	.173	58.6	.5	..	..	Clear.
	3	19.4	761.00	29.864	64.6	29.958	29.862	...	48.	42.	.215	52.2	2.5	..	..	Clear.
	4	19.7	761.10	29.867	64.5	29.960	29.864	...	46.3	39.	.170	53.	3.5	..	..	Clear.
	5	20.5	762.00	29.897	65.2	29.992	29.900	...	45.7	37.	.139	55.	3.0	..	..	Clear.
	6	21.2	763.15	29.940	67.4	30.040	29.936	...	42.5	33.5	.107	60.	2.0	..	..	Clear.
	7	20.	763.30	29.951	67.	30.044	29.941	...	42.5	35.5	.146	62.	3.5	..	..	Clear.
	8	17.3	763.35	29.966	65.	30.050	29.952	...	43.2	36.4	.156	63.	4.8	..	.6	Cu., Ci-cu.
	9	16.8	763.10	29.939	62.7	30.044	29.953	...	44.	36.5	.150	62.5	7.0	..	.3	Cu., NNW.
	10	17.8	763.00	29.950	62.2	30.040	29.950	...	45.	37.5	.158	62.7	6.0	..	.3	Cu., NNW.
	11	17.8	763.10	29.954	62.6	30.044	29.953	66.	46.1	38.5	.166	63.	150	8.0	.4	Cu., NNW.
	12	18.5	763.60	29.970	63.	30.068	29.975	66.	47.3	38.6	.155	60.	150	6.5	.3	Cu., NNW.
	13	21.2	764.30	29.986	66.2	30.092	29.991	...	48.	39.	.151	59.3	150	4.5	.4	Cu., NNW.
	14	20.9	764.40	29.991	67.5	30.100	29.996	69.5	46.3	39.3	.157	59.	150	6.0	.4	Cu., NNW.
	15	19.8	765.00	30.020	66.8	30.130	30.017	72.	48.5	39.2	.153	58.3	150	6.0	.3	Cu., NNW.
	16	19.5	765.25	30.031	66.	30.130	30.029	...	47.5	38.4	.148	58.5	160	4.0	.1	Cu., NNW.
	17	18.6	766.40	30.081	65.	30.172	30.074	...	45.6	38.3	.166	60.	160	3.0	..	Clear.
	18	17.5	767.20	30.117	63.4	30.202	30.108	...	42.4	36.4	.165	59.	160	3.3	..	Clear.
	19	17.1	767.60	30.136	63.2	30.226	30.136	...	41.	34.5	.144	62.	160	2.8	..	Clear.
	20	16.	769.30	30.205	60.3	30.290	30.203	...	37.7	32.5	.144	64.	200	3.0	..	Clear.
	21	15.	770.00	30.238	60.6	30.314	30.232	35.	35.5	30.8	.123	66.	180	2.2	..	Clear.
	22	16.1	771.30	30.284	59.2	30.360	30.277	33.6	33.7	28.5	.133	70.	167	..	..	Clear.
	23	15.8	771.25	30.284	58.8	30.358	30.275	32.	33.6	29.	.132	70.3	169	..	..	Clear.

Observed dew point: 3h., 38° 2; 21h., 18° 4.

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

MARCH.]

Day.	Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.						
29	0	15.6	771.25	30.285	59.2	30.350	30.267	31.3	33.5	29.8	70.8	153	..	..	..	Clear.
	1	16.5	771.45	30.293	59.6	30.364	30.282	30.1	33.2	30.7	71.	163	..	..	..	Clear.
	2	16.2	771.60	30.297	59.1	30.376	30.293	27.4	31.7	28.5	74.	142	..	.3	..	Cl., Ci-s.
	3	15.7	771.20	30.283	58.7	30.354	30.272	28.	32.1	29.6	74.2	142	..	.7	..	Cl., Ci-s.
	4	16.3	771.50	30.291	59.9	30.368	30.285	28.	31.	28.6	77.	142	..	..	..	Clear.
	5	16.9	771.65	30.295	59.8	30.380	30.294	28.	31.2	28.3	76.4	142	..	..	..	Clear.
	6	16.8	772.25	30.319	60.5	30.392	30.305	..	32.4	29.1	74.	142	..	..	..	A few Ci-s. in E.
	7	17.3	772.55	30.328	61.2	30.418	30.329	..	35.5	31.5	71.9	127	..	..	..	Clear.
	8	18.7	772.70	30.327	62.3	30.424	30.332	..	38.2	34.3	70.	127	..	..	..	Cl., Ci-cu.
	9	20.	773.50	30.352	64.4	30.450	30.352	..	40.8	34.4	66.7	127	..	.05	..	Ci-s., Ci-cu.
	10	20.2	773.30	30.343	65.8	30.436	30.334	..	43.	36.5	64.	142	..	.3	..	Ci-s., Ci-cu., Ci.
	11	21.8	772.60	30.309	67.7	30.420	30.314	80.1	46.5	40.4	63.2	124	..	.6	..	Cl.
	12	23.1	772.00	30.279	70.3	30.386	30.283	89.	48.2	40.4	60.3	50	..	.3	..	Cl., Ci-cu.
	13	23.2	771.30	30.251	71.3	30.370	30.254	..	51.	43.3	63.	5	..	.6	..	Cl., Ci-cu.
	14	23.3	770.45	30.216	72.	30.334	30.216	..	53.4	45.4	61.	40	..	.7	..	Cl., Ci-cu.
	15	22.	769.55	30.187	71.	30.300	30.185	..	53.5	44.1	59.3	30	..	.6	..	Cl., Ci-cu.
	16	21.9	769.00	30.166	70.6	30.280	30.166	..	53.2	44.7	61.3	20	..	.8	..	Cl.
	17	20.6	768.55	30.156	69.1	30.240	30.131	..	61.5	43.	62.2	15	..	.9	..	Cl., Ci-s.
	18	20.	767.75	30.126	67.9	30.220	30.113	..	50.	45.	66.2	15	..	1.0	..	Cl., Ci-s.
	19	19.6	767.60	30.122	66.8	30.210	30.106	..	48.4	44.4	70.	15	..	1.0	..	Cl., Ci-s.
	20	17.9	767.20	30.115	64.8	30.186	30.088	..	44.8	42.5	73.2	15	..	1.0	..	Cl., Ci-s.
	21	17.2	767.30	30.122	63.3	30.170	30.096	..	44.5	40.7	76.	360	..	1.0	..	N., rain.
	22	15.6	766.25	30.069	61.3	30.162	30.074	..	43.8	41.4	78.9	358	..	1.0	..	Very dark.
	23	15.1	765.50	30.062	59.8	30.134	30.049	..	44.8	41.	82.4	358	..	1.0	..	No stars visible.

Observed dew point: 3h., 17° 3; 9h., 27°; 15h., 30° 6; 21h., 38° 5.

Date.	Barometer No. 14			Barometer No. 2.			Thermometers, Fah.			Hygr., Sausure's	Wind.		Rain, inches.	Sky covered, 10ths	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
30	0	764.65	30.020	60.4	30.094	30.008	....	44.6	41.5	.244	82.	.6	1.0	1.0	Cu, N.
1	18.8	764.35	29.998	63.	30.080	29.987	....	44.3	41.2	.241	82.4	1.3	1.0	1.0	N.
2	19.3	763.10	29.947	65.	30.032	29.934	....	44.	40.9	.238	82.5	1.0	.8	.8	Ci cu., Ci-s, S.
3	16.5	762.00	29.918	67.5	29.999	29.894	....	43.7	40.5	.233	83.	.6	1.0	1.0	Ci-cu., Ci-s, S.
4	21.2	761.30	29.868	68.3	29.964	29.857	....	44.	41.	.240	84.	.2	1.0	1.0	Ci-s, S.
5	21.4	760.75	29.846	68.3	29.946	29.839	....	44.2	41.	.238	84.	....	1.0	1.0	Ci-s, S.
6	21.7	759.75	29.804	69.2	29.900	29.791	....	44.	41.	.240	86.	....	.8	.8	Ci-cu., Ci-s, S.
7	21.4	759.50	29.796	69.4	29.900	29.790	....	45.	42.5	.260	86.	....	.9	.9	Ci-cu., Ci-s, S.
8	20.3	758.20	29.750	68.2	29.850	29.744	....	48.	45.	.280	85.	....	1.0	1.0	Ci-cu., Ci-s, S.
9	19.5	757.50	29.727	67.	29.822	29.719	....	51.	46.2	.274	80.	.2	....	....	Clear.
10	20.8	757.00	29.700	67.2	29.800	29.697	....	56.5	50.5	.313	76.5	....	....	....	Clear.
11	21.8	756.10	29.660	68.8	29.766	29.659	....	61.	52.	.299	69.9	.8	1.0	1.0	Ci-cu., Cu.
12	21.	755.25	29.632	69.5	29.730	29.622	....	63.8	54.	.320	68.	1.0	1.0	1.0	Ci-s.
13	22.4	754.35	29.590	70.4	29.690	29.580	....	66.7	56.8	.340	65.	1.0	1.0	1.0	Ci-s.
14	23.4	753.70	29.560	71.4	29.670	29.557	....	67.7	57.	.355	64.	40	1.0	1.0	Ci-s.
15	24.3	753.65	29.553	73.2	29.664	29.547	....	69.	58.	.368	65.	50	1.0	1.0	Ci-s.
16	25.	753.60	29.548	74.5	29.664	29.543	....	71.	59.	.374	63.	110	1.0	1.0	Ci-s, Ci cu.
17	25.	753.90	29.550	75.	29.676	29.551	....	70.	61.	.442	64.	115	1.0	1.0	Ci-s, Ci cu.
18	24.8	754.30	29.577	75.2	29.692	29.570	....	68.5	60.	.428	67.	110	1.0	1.0	Ci-s, Ci cu.
19	24.5	754.60	29.591	75.	29.712	29.590	....	67.5	58.5	.397	69.	110	1.0	1.0	Ci-s, Ci cu.
20	24.5	755.45	29.624	74.8	29.746	29.624	....	64.	56.	.370	75.	110	1.0	1.0	Ci-cu., Ci-s.
21	25.5	756.30	29.649	75.6	29.778	29.655	....	59.	52.5	.334	78.2	115	.3	.3	Ci-cu., Cu.
22	24.4	757.85	29.717	75.5	29.884	29.708	....	53.1	48.3	.397	79.	187	.2	.2	Ci-s.
23	23.8	758.00	29.724	74.6	29.838	29.717	....	51.1	46.2	.272	79.	155	....	....	Clear.

Observed dew point: 3h, 36° 5; 9h, 45°; 15h, 47°; 21h, 44° 2.

MARCH.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Day.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Saunures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Wet.	Dry.						
31	0	22.7	758.00	29.730	72.6	29.838	29.720	...	49.7	44.2	212	79.8	159	2	.2	Ci-s.
	1	22.1	759.25	29.742	71.5	29.843	29.733	...	48.6	44.3	239	79.	152	...	.3	Ci-s.
	2	22.	758.80	29.768	70.7	29.860	29.748	...	47.2	43.	216	78.1	130	...	...	Clear.
	3	21.9	758.55	29.756	70.	29.860	29.749	44.	46.6	42.	232	78.3	120	.3	...	Clear.
	4	21.8	759.05	29.776	69.7	29.880	29.770	44.	46.	41.6	231	79.	123	.2	.5	Ci-s., Ci-cu.
	5	21.5	759.25	29.785	69.3	29.876	29.786	46.	47.3	42.3	230	76.9	118	.7	.8	S.
	6	21.4	759.85	29.810	69.2	29.894	29.781	...	47.5	41.	201	75.	128	1.8	.7	Ci-cu., Cu.
	7	21.9	760.45	29.831	69.	29.921	29.811	...	43.	42.	216	73.5	128	2.8	.2	Ci-s. and S.
	8	23.7	760.75	29.835	71.1	29.924	29.810	...	49.3	41.3	187	69.5	127	2.3	.1	Cu.
	9	22.3	761.00	29.850	71.6	29.938	29.813	70.	49.5	39.5	148	61.	130	4.0	...	Clear.
	10	21.7	761.30	29.865	71.	29.975	29.861	71.5	49.	37.7	117	57.	130	5.0	...	A few small Ci. in Hor.
	11	20.	761.45	29.879	69.	29.976	29.867	69.	48.8	37.8	122	57.	130	6.7	...	A few small Ci. in Hor.
	12	19.	761.30	29.878	66.8	29.970	29.867	70.	49.	39.	143	59.	140	6.2	.2	Cu., NW.
	13	18.	761.50	29.891	64.5	29.980	29.884	...	48.	37.6	126	58.	150	5.2	.6	Cu., NW.
	14	17.	761.50	29.896	63.	29.980	29.897	...	48.5	38.5	139	59.	150	5.0	.8	Cu., WNW.
	15	16.3	762.00	29.918	61.	29.998	29.911	...	47.5	37.5	130	61.	100	4.5	1.0	Cu., WNW.
	16	16.7	762.75	29.946	60.7	30.029	29.913	...	47.	39.	164	62.	140	4.0	.2	Cu., WNW.
	17	18.3	764.00	29.987	62.	30.078	29.988	...	47.	36.5	149	62.8	130	5.7	...	A few Cu.
	18	19.1	765.25	30.032	64.1	30.130	30.035	...	42.5	36.	156	56.	130	6.0	...	Clear, a few Cu.
	19	19.6	765.80	30.052	64.9	30.152	30.054	...	41.	32.5	106	57.2	130	4.5	...	A few Cu.
	20	19.	767.75	30.132	65.3	30.236	30.127	...	37.5	31.5	135	61.0	180	1.7	...	Clear.
	21	19.	768.40	30.158	65.	30.256	30.168	...	35.2	29.9	131	63.5	180	.2	...	Clear.
	22	17.8	768.75	30.178	63.9	30.260	30.165	32.	33.	29.4	145	65.5	184	.2	...	Clear.
	23	17.4	769.10	30.192	62.8	30.262	30.169	30.5	32.4	28.3	133	66.	201	Clear.

Observed dew point: 3h., 37°; 21h., 18.°5.

April.]

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DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

[97]

Date.		Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.		Dir., degrees.	Force, lbs.			
1	0	16.9	769.60	30.214	61.8	30.316	30.225	28.1	31.2	141	193	..	..	..	Clear.
	1	17.4	770.30	30.238	62.	30.322	30.231	26.	29.9	124	193	..	..	..	Clear.
	2	18.	770.50	30.243	62.8	30.324	30.230	24.	28.6	128	192	..	..	..	Ci s.
	3	19.3	770.55	30.238	63.5	30.344	30.249	23.	28.	125	190	..	..	..	Ci., Ci-cu.
	4	18.5	771.20	30.268	63.8	30.350	30.253	22.5	26.	114	190	..	..	..	Clear.
	5	18.8	771.85	30.293	63.8	30.386	30.259	...	27.5	118	190	..	..	..	Clear.
	6	19.2	772.55	30.319	63.7	30.426	30.331	...	29.5	125	190	..	..	..	Clear.
	7	18.2	773.05	30.340	64.	30.430	30.338	...	30.7	124	190	..	..	..	Clear.
	8	17.5	773.00	30.345	63.	30.422	30.328	...	32.5	104	190	..	..	..	Clear.
	9	16.8	773.25	30.359	62.	30.450	30.359	66.5	33.5	112	145	..	..	..	Clear.
	10	18.	773.50	30.362	62.	30.458	30.367	64.5	34.1	110	150	..	..	..	Ci. in W.
	11	19.4	773.75	30.365	64.	30.464	30.367	67.	36.5	115	170	..	..	..	Ci.
	12	19.5	773.30	30.346	66.	30.450	30.318	67.5	37.6	124	170	..	..	..	Ci.
	13	20.	773.00	30.332	66.	30.428	30.326	67.	39.7	115	150	..	..	..	Ci. (light.)
	14	20.	772.20	30.300	66.3	30.408	30.305	71.5	41.6	119	140	..	..	..	Ci.
	15	21.	772.00	30.288	67.5	30.388	30.282	71.	43.4	131	135	..	..	..	Ci.
	16	20.9	771.70	30.277	67.8	30.382	30.275	...	44.7	111	135	..	..	..	Ci. in SW.
	17	20.6	771.70	30.279	67.5	30.382	30.276	...	45.5	131	110	..	..	..	Ci. in SW.
	18	20.	771.60	30.277	67.	30.379	30.274	...	44.	168	90	..	..	..	Clear.
	19	19.1	771.20	30.265	66.	30.364	30.262	...	41.8	174	110	..	..	..	Clear.
	20	19.1	771.45	30.275	64.8	30.374	30.273	...	38.5	152	60	..	..	..	Clear.
	21	19.7	771.45	30.273	65.5	30.374	30.273	38.2	37.	180	60	..	..	..	Clear.
	22	18.6	771.15	30.266	65.	30.350	30.250	35.	37.	180	71	..	..	..	Clear.
	23	18.2	771.35	30.275	64.	30.356	30.259	34.8	38.2	177	27	..	..	..	Clear.

Observed dew point: 34., 20°; 21h., 23° 8.

926

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

APRIL.]

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gaumure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.						
2	0	17.8	770.40	30.241	63.1	30.336	30.242	.....	38.2	34.	.166	27	.....	..	2	Cl cu.
	1	17.4	770.35	30.240	62.3	30.328	30.236	.....	38.6	34.2	.165	28	.....	..	.7	Cl cu., Cu.
	2	16.8	770.15	30.236	61.5	30.310	30.220	.....	39.	35.2	.180	28	.....	..	1.0	Cl cu., Cu., Cl-s.
	3	17.5	770.20	30.234	61.8	30.320	30.230	.....	39.	36.	.196	28	.....	..	1.0	N.
	4	16.8	769.10	30.195	61.2	30.270	30.181	.....	40.	36.5	.194	10	.....	..	1.0	N.
	5	17.5	769.20	30.195	61.3	30.232	30.192	.....	40.5	37.5	.208	300	.....	..	1.0	Cl cu., Cl-s.
	6	17.5	769.00	30.190	62.	30.272	30.192	.....	41.5	37.9	.206	1.0	.....	..	1.0	Cl cu., Cl-s.
	7	16.	768.80	30.186	61.2	30.264	30.177	.....	42.5	39.5	.226	0	.....	..	1.0	Cl cu., Cl-s.
	8	14.8	768.50	30.181	59.5	30.254	30.170	.....	45.	40.	.207	0	.....	..	1.0	Cl cu.
	9	14.	768.35	30.180	58.	30.250	30.171	.....	47.5	43.	.242	35	.....	..	9	Cl, Cl cu., Cl-s., W.
	10	14.2	767.90	30.161	57.3	30.228	30.161	.....	49.3	43.6	.235	30	.....	..	.7	Cl, Cl cu., Cl-s., W.
	11	14.5	767.00	30.124	57.3	30.200	30.123	.....	52.1	45.	.233	40	.....	..	.9	Cl, Cl cu., Cl-s., W.
	12	17.7	766.40	30.085	59.5	30.178	30.095	.....	56.5	48.	.254	70	.....	..	.7	Cl, Cl cu., Cl-s., W.
	13	19.8	765.65	30.046	63.2	30.146	30.063	.....	61.1	51.1	.276	45	.....	..	.4	Cl-s.
	14	22.	765.25	30.019	67.2	30.132	30.029	.....	64.	53.5	.278	45	.....	..	.....	Hazy in Hor.
	15	23.3	764.90	29.999	70.3	30.110	29.998	.....	66.1	54.	.292	45	.....	..	.....	Hazy in Hor.
	16	24.7	764.65	29.983	73.2	30.100	29.981	.....	67.5	55.5	.312	45	.....	..	.....	Hazy in Hor.
	17	25.	764.30	29.967	74.7	30.088	29.965	.....	66.	56.2	.349	45	.....	..	.....	Hazy in Hor.
	18	25.	764.20	29.963	75.7	30.090	29.964	.....	68.5	55.	.345	45	.....	..	.....	Hazy.
	19	24.7	764.20	29.965	75.5	30.091	29.965	.....	68.	54.	.318	45	.....	..	.....	Hazy.
	20	24.1	761.55	29.981	75.	30.102	29.977	.....	58.7	51.5	.313	35	.....	..	.....	Hazy in Hor.
	21	23.	764.40	29.981	73.6	30.100	29.980	57.	58.	51.5	.319	35	.....	..	.....	Hazy.
	22	21.7	764.25	29.981	71.1	30.094	29.980	.....	57.5	51.	.312	35	.....	..	.....	Hazy.
	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45	.....	..	.....	.....

Observed dew point: 3h., 28° 2; 9h., 36°; 15h., 40° 8.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Day.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
4	0 18.6	763.80	29.978	64.4	30.048	29.942	...	53.6	49.5	.332	259	.3	1.0	N.	
	1 17.6	763.05	29.953	63.4	30.034	29.910	...	52.7	49.6	.333	246	.2	1.0	N., rain.	
	2 17.3	763.20	29.959	62.5	30.040	29.949	...	50.2	47.	.301	229	.3	1.0	N.	
	3 17.1	763.10	29.956	62.	30.034	29.944	...	50.	48.5	.338	247	.01	1.0	N., rain.	
	4 16.7	762.65	29.942	61.7	30.018	29.930	...	49.2	48.1	.338	240	1.0	1.0	N., rain.	
	5 17.5	762.55	29.934	61.5	30.016	29.928	...	49.2	48.	.335	245	1.0	1.0	N., rain.	
	6 22.2	764.10	29.971	66.7	30.100	29.998	...	47.5	45.6	.299	250	1.7	1.0	N., rain.	
	7 23.6	765.00	30.001	70.6	30.134	30.012	...	45.2	43.6	.282	250	.8	1.0	N., rain.	
	8 23.6	764.75	29.992	71.2	30.108	29.984	...	44.9	43.7	.287	259	.7	1.0	N., rain.	
	9 20.	765.25	30.028	69.	30.126	30.017	...	44.	43.	.282	250	1.3	1.0	N., rain.	
	10 18.3	765.10	30.030	66.3	30.122	30.020	...	44.	42.6	.273	230	2.2	1.0	N.	
	11 17.	765.60	30.057	63.5	30.138	30.044	...	43.	42.	.272	250	1.6	1.0	N., rain.	
	12 15.7	764.90	30.026	61.	30.112	30.025	...	42.5	41.6	.268	250	1.7	1.0	N., rain.	
	13 14.6	765.00	30.045	59.	30.116	30.034	...	42.	40.8	.258	250	2.8	1.0	N.	
	14 13.	764.80	30.045	56.3	30.110	30.035	...	41.2	40.2	.255	250	2.3	1.0	N., rain.	
	15 14.5	764.85	30.040	66.	30.112	30.038	...	41.2	40.5	.261	250	2.0	1.0	N., rain.	
	16 16.7	765.80	30.040	68.	30.128	30.049	...	41.6	40.5	.257	250	2.0	1.0	N.	
	17 18.	766.30	30.040	61.3	30.129	30.040	...	42.	40.5	.252	250	2.3	1.0	N.	
	18 18.	765.20	30.040	62.5	30.128	30.037	...	41.	40.5	.263	250	2.0	1.0	N.	
	19 18.1	765.30	30.040	62.8	30.128	30.036	...	41.	40.5	.263	250	2.0	1.0	N.	
	20 18.	765.70	30.056	62.9	30.144	30.052	...	41.	40.	.253	250	2.7	1.0	N.	
	21 17.9	765.75	30.059	62.7	30.146	30.055	...	41.	40.1	.255	250	1.8	1.0	N.	
	22 18.7	765.45	30.043	62.9	30.130	30.037	...	41.	39.9	.251	248	...	1.0	N.	
	23 18.9	766.10	30.027	64.	30.116	30.021	...	40.6	39.6	.250	247	...	1.0	N.	

Observed dew point: 3h., 46°.1; 9h., 42°.2; 15h., 40°.3; 21h., 37°.6.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.				Barometer No. 2.				Thermometers, Fah.			Force of vapor, ins.	Hygt., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Dir., degrees.			Force, lbs.				
9	0	20.5	764.75	30.008	65.9	30.090	29.989	...	40.6	39.8	.254	93.	255	1.2	...	1.0	N., drizzle.	
	1	21.	764.35	29.988	66.9	30.080	29.977	...	40.6	39.9	.256	92.3	259	.3	...	1.0	N., drizzle.	
	2	19.6	764.00	29.981	66.2	30.064	29.963	...	40.3	39.6	.253	92.6	254	.3	...	1.0	N., drizzle.	
	3	19.8	763.80	29.949	66.	30.044	29.943	...	40.5	40.	.258	93.	247	.2	...	1.0	N., hard rain.	
	4	20.5	763.35	29.950	66.3	30.044	29.943	...	40.	39.3	.250	93.	230	...	...	1.0	N., hard rain.
	5	20.5	763.10	29.940	66.5	30.036	29.934	...	39.5	39.	.249	93.	230	...	.02	1.0	N., drizzle.
	6	20.6	763.50	29.956	67.5	30.050	29.946	...	40.	39.3	.250	93.	230	...	...	1.0	N.
	7	20.	763.85	29.973	67.	30.070	29.967	...	40.7	39.8	.253	91.	193	...	...	1.0	N.
	8	20.4	764.00	29.976	66.8	30.070	29.967	...	40.7	39.7	.251	91.	220	...	...	1.0	N.
	9	20.7	764.30	29.988	67.2	30.076	29.973	...	41.4	40.	.248	91.	250	...	...	1.0	N.
	10	20.	764.50	29.999	67.	30.100	29.997	...	42.	40.5	.252	89.4	215	...	...	1.0	N.
	11	19.7	764.40	29.997	65.5	30.082	29.983	...	43.5	42.	.266	88.	225	...	...	1.0	N.
	12	18.	764.00	29.989	64.	30.080	29.985	...	44.6	43.8	.271	88.	215	...	...	1.0	N.
	13	19.2	764.20	29.991	64.	30.084	29.989	...	46.4	44.2	.281	86.	190	...	...	1.0	N.
	14	21.5	764.20	29.981	67.	30.084	29.981	...	48.1	45.5	.291	85.	170	...	...	1.0	N.
	15	22.	764.10	29.974	69.	30.080	29.971	...	49.6	46.6	.298	83.	160	...	...	1.0	N.
	16	21.7	764.35	29.981	69.2	30.087	29.977	...	50.6	47.4	.306	82.7	150	...	.6	Cu., Cu.	
	17	21.2	764.30	29.986	69.1	30.088	29.979	...	51.7	48.1	.310	81.7	150	...	...	A few Cu.	
	18	20.3	764.95	30.016	68.	30.110	30.004	...	52.	49.	.327	81.5	150	...	...	Cu. at Hor.	
	19	20.	765.15	30.024	67.	30.126	30.023	...	49.5	47.5	.321	87.	150	...	...	Cu. at Hor.	
	20	18.8	766.00	30.063	65.2	30.156	30.058	...	46.5	45.	.297	88.2	150	...	...	.2	Cu.
	21	18.	766.50	30.068	64.	30.176	30.081	...	46.5	44.	.293	90.2	150	...	...	.5	Cu.
	22	16.8	765.50	30.054	62.2	30.080	29.990	...	44.5	43.6	.290	90.7	69	Ch s., Cu.	
23	16.6	766.70	30.102	61.1	30.080	29.993	...	44.	43.1	.284	90.9	692	Cu.		

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Observed dew point: 3h., 41°; 9h., 37°; 21h., 42°.

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

APRIL.]

Day.	Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature,	Obs'd height,	Corr. height,	Temperature,	Obs'd height,	Corr. height,	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
6	0	16.9	766.75	30.103	60.9	30.096	30.009	...	44.8	44.	.295	90.8	69	...	...	.5	Cu.
	1	19.6	767.85	30.133	63.4	30.226	30.132	...	43.	42.5	.282	92.4	31	...	...	.8	S., foggy.
	2	20.5	768.10	30.138	65.6	30.236	30.137	...	41.7	41.2	.270	92.7	32	...	...	1.0	Dense fog.
	3	21.2	768.15	30.136	67.5	30.236	30.132	...	40.5	39.7	.253	92.	32	...	...	1.0	Dense fog.
	4	21.	768.20	30.138	67.5	30.240	30.136	...	41.	40.	.253	92.	30	...	...	.8	N.
	5	19.9	768.50	30.155	67.3	30.245	30.141	...	41.5	40.	.247	91.5	35	...	...	.4	N.
	6	19.8	769.00	30.174	67.2	30.270	30.165	...	41.7	40.	.245	91.	35	...	...	.1	Cu. at Hor.
	7	21.4	769.35	30.182	67.	30.284	30.181	...	45.3	43.6	.281	85.	35	...	...	...	Clear.
	8	22.	769.90	30.201	68.5	30.300	30.191	...	50.5	46.	.275	82.5	140	...	...	...	Clear.
	9	22.3	769.70	30.192	70.	30.303	30.190	...	52.5	46.5	.263	78.	235	...	...	...	Clear.
	10	21.7	769.40	30.183	70.2	30.290	30.177	92.	54.	48.5	.292	74.	240	...	...	.1	Ci. in W.
	11	22.	769.00	30.166	70.2	30.270	30.157	94.	56.1	49.9	.301	72.	310	...	...	.1	Ci. in W.
	12	22.	769.00	30.166	70.2	30.270	30.157	88.	57.3	50.8	.310	71.7	25	...	...	.8	Ci. in W.
	13	22.	768.25	30.137	70.2	30.242	30.129	86.5	59.8	58.	.337	71.	40	...	...	.7	Ci. in W.
	14	22.	767.40	30.103	70.2	30.210	30.097	87.5	61.7	54.2	.346	69.5	30	...	...	.5	Ci. in W.
	15	22.	766.70	30.076	70.2	30.186	30.073	...	62.4	54.	.332	68.	30	...	...	.7	Ci. in W.
	16	22.	766.20	30.056	70.2	30.164	30.051	...	61.5	53.7	.335	68.5	35	...	...	.9	Ci. in W.
	17	22.	765.80	30.041	70.	30.160	30.039	...	62.5	55.5	.370	70.	35	...	...	.8	Ci. in W.
	18	21.5	765.30	30.024	69.9	30.130	30.019	...	59.3	53.	.342	77.	35	...	...	.9	Ci. in W.
	19	21.	765.60	30.037	69.8	30.142	30.032	...	58.5	52.5	.361	79.	35	...	...	.9	Ci. in W.
	20	20.	765.60	30.042	68.	30.142	30.036	...	53.	49.5	.328	80.	10	...	...	1.0	Cu. in W.
	21	19.1	765.00	30.022	66.2	30.116	30.015	...	51.5	48.5	.321	82.5	10	...	...	1.0	Cu. in W.
	22	17.9	764.20	29.998	64.2	30.072	29.977	...	50.4	48.2	.326	87.	15	...	...	1.0	Cu. in W.
	23	17.	764.00	29.994	64.	30.050	29.955	...	50.2	47.	.301	86.	14	...	...	1.0	Cu. in W.

Observed dew point: 9h., 42°; 15h., 47°; 4h., 42°; 3.

APRIL.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hydr. gauge.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
7	0	17.2	763.00	29.952	62.8	30.024	29.931	...	50.2	47.7	.317	88	...	...	1.0	Very dark.
	1	18.8	763.00	29.944	62.2	30.032	29.942	...	50.5	48.7	.337	89	...	...	1.0	Very dark.
	2	21.5	762.50	29.914	62.7	30.000	29.901	...	50.6	48.8	.398	89.1	...	...	1.0	Very dark.
	3	23.7	761.20	29.852	70.5	29.968	29.854	...	50.7	48.8	.336	92	...	...	1.0	N.
	4	23.	761.00	29.847	70.5	29.960	29.848	...	50.7	49.	.342	92	...	...	1.0	N.
	5	22.5	761.40	29.865	70.5	29.942	29.830	...	50.8	49.8	.360	92	...	...	1.0	N.
	6	21.8	761.60	29.877	70.3	29.920	29.808	...	50.9	50.3	.370	92	...	...	1.0	N.
	7	21.4	760.00	29.816	70.3	29.912	29.800	...	50.9	50.2	.368	92	...	...	1.0	N.
	8	22.8	759.60	29.793	71.4	29.900	29.785	...	51.7	52.	.378	92	...	...	1.0	N.
	9	23.	759.30	29.780	72.	29.892	29.777	...	51.6	50.8	.375	92	...	...	1.0	N.
	10	23.	759.35	29.782	72.	29.896	29.780	...	53.6	52.6	.397	90.5	...	...	1.0	S., slight rain.
	11	22.5	758.25	29.741	71.5	29.856	29.736	...	55.5	53.6	.401	88.5	...	...	1.0	N.
	12	22.	757.70	29.724	71.	29.830	29.717	...	55.9	53.9	.404	90	...	...	1.0	N.
	13	22.	756.80	29.688	70.2	29.792	29.682	...	57.	55.	.420	89.3	...	...	1.0	N.
	14	22.5	757.00	29.692	71.	29.800	29.687	...	56.5	55.5	.439	91.7	...	...	1.0	N., raining hard.
	15	23.	755.85	29.645	71.7	29.752	29.637	...	56.5	55.5	.439	92	...	...	1.0	N.
	16	24.	755.60	29.633	72.8	29.744	29.626	...	56.	55.	.431	91.5	...	...	1.0	N.
	17	24.	755.30	29.620	73.5	29.732	29.614	...	56.5	55.	.435	92	...	...	1.0	N.
	18	24.7	755.30	29.617	74.5	29.732	29.611	...	56.5	54.3	.419	92	...	...	1.0	N.
	19	24.8	755.25	29.615	74.7	29.722	29.601	...	54.7	53.4	.404	92	...	...	1.0	N.
	20	25.1	756.00	29.642	75.3	29.752	29.629	...	52.5	52.	.394	93	...	...	1.0	N.
	21	25.	752.25	29.613	75.1	29.724	29.602	...	50.5	50.	.367	93	...	...	1.0	N.
	22	24.	754.85	29.603	74.1	29.714	29.594	...	50.5	49.5	.366	93	...	...	1.0	N.
	23	23.	756.05	29.652	73.2	29.762	29.643	...	49.5	48.7	.348	92.7	...	...	1.0	N., drizzle.

Observed dew point: 3h., 47° 5; 9h., 50° 8; 15h., 54°; 21h., 49°.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

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Day.	Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
8	0	23.4	755.25	29.621	72.2	29.720	29.605	...	49.5	48.6	.346	92.2	265	.2	1.0	N., drizzling.	
	1	24.7	755.05	29.607	73.4	29.710	29.592	...	49.4	48.6	.347	92.	260	..	1.0	N., drizzling.	
	2	24.8	755.00	29.605	74.5	29.700	29.579	...	48.8	47.8	.335	91.0	240	.2	1.0	N.	
	3	23.5	755.75	29.638	73.7	29.752	29.632	...	48.	46.7	.318	92.	210	.7	1.0	N.	
	4	23.3	755.75	29.641	72.	29.750	29.633	...	46.7	46.	.318	92.	210	.4	1.0	N.	
	5	23.2	755.80	29.641	72.	29.758	29.641	...	46.5	45.6	.311	92.	210	.3	1.0	N.	
	6	...	.....	*29.671	...	.....	*29.666	...	*45.7	....	*.306	*93.1	210	..	1.0	N.
	7	22.	756.40	29.671	70.8	29.778	29.664	...	46.5	45.8	.315	92.	210	.2	1.0	N.	
	8	21.5	757.10	29.702	69.5	29.800	29.690	...	47.	45.5	.303	91.	255	.2	1.0	N.	
	9	21.	757.85	29.733	69.	29.840	29.731	...	47.3	46.	.311	91.	270	.1	1.0	N.	
	10	21.3	757.75	29.728	69.	29.836	29.727	...	46.7	45.9	.313	91.7	260	..	1.0	N.	
	11	21.7	757.50	29.716	69.1	29.820	29.711	...	47.2	46.	.313	91.	240	..	1.0	N.	
	12	21.4	757.35	29.712	69.2	29.815	29.706	...	48.2	46.8	.318	90.5	260	..	1.0	N.	
	13	21.	757.30	29.711	69.	29.814	29.705	...	48.5	47.	.320	90.	240	..	1.0	N.	
	14	21.	757.05	29.701	68.6	29.806	29.699	...	48.4	47.1	.323	91.	250	..	1.0	N.	
	15	21.	756.60	29.683	68.4	29.792	29.685	...	48.	47.	.326	91.5	250	..	1.0	N.	
	16	21.	756.70	29.687	68.3	29.796	29.689	...	48.	46.8	.321	90.3	250	.6	1.0	N.	
	17	20.3	756.85	29.697	68.	29.800	29.694	...	46.5	45.	.297	89.	240	.7	1.0	N.	
	18	19.8	757.40	29.722	67.	29.820	29.717	...	46.	44.5	.292	89.	250	.8	1.0	N.	
	19	19.1	757.70	29.736	66.	29.834	29.733	...	44.5	44.	.298	92.	250	.5	1.0	N.	
	20	19.	756.85	29.703	64.9	29.830	29.723	...	43.9	43.	.283	92.6	253	.5	1.0	N.	
	21	19.7	756.90	29.702	65.4	29.831	29.732	...	43.8	42.8	.280	92.	250	.5	1.0	N., raining hard.	
	22	18.9	756.15	29.754	65.3	29.844	29.745	...	43.2	42.5	.280	92.3	258	.2	1.0	N., raining hard.	
23	17.9	756.15	29.760	64.2	29.844	29.749	...	42.9	42.1	.275	92.8	248	.3	1.0	N., raining hard.		

* Supplied.

Observed dew point: 3h., 46°; 9h., 45°; 3; 15h., 46°; 2; 21h., 40°; 4.

APRIL.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.		Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gauges's.	Wind.		Sky covered, 10ths.	Clouds, and direction of their strata.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.		
9	0	19.3	758.00	29.746	64.8	29.756	29.653	...	41.8	40.6	257	244	3.0	1.0	N., raining.
	1	20.	757.65	29.730	66.2	29.768	29.667	...	41.2	40.3	257	244	2.7	1.0	N., raining.
	2	20.6	757.30	29.713	67.9	29.800	29.694	...	40.7	40.	256	245	2.5	1.0	N., raining.
	3	19.5	757.00	29.707	67.8	29.790	29.684	...	40.5	39.7	253	280	2.5	1.0	N., raining.
	4	18.2	757.00	29.712	65.	29.790	29.692	...	40.	39.	244	216	2.7	1.0	N., raining.
	5	16.8	756.95	29.718	63.	29.782	29.689	...	39.5	38.6	242	222	2.3	1.0	N., raining.
	6	15.5	756.90	29.721	60.7	29.780	29.694	...	39.2	38.3	239	200	4.2	1.0	N., raining.
	7	16.5	757.45	29.740	58.8	29.800	29.718	...	39.5	38.	239	220	4.5	1.0	N., raining.
	8	15.7	757.75	29.756	60.8	29.830	29.743	...	38.5	38.3	247	203	5.5	1.0	N., raining.
	9	17.6	758.00	29.755	62.	29.842	29.752	...	39.	38.3	241	225	5.0	1.0	N., raining, NE.
	10	17.	758.30	29.770	61.8	29.854	29.765	...	40.	39.2	242	215	4.5	1.0	N., raining, NE.
	11	17.	758.30	29.770	61.2	29.854	29.767	...	40.5	39.2	243	215	3.3	1.0	N., raining, NE.
	12	17.8	758.50	29.774	62.	29.864	29.774	...	41.	39.7	248	200	2.5	1.0	N., raining, NE.
	13	18.2	758.50	29.775	62.6	29.868	29.777	...	42.7	40.3	240	200	2.7	1.0	N., raining, NE.
	14	18.	758.60	29.777	62.8	29.860	29.767	...	44.5	41.5	245	215	2.6	1.0	N., NE.
	15	19.2	759.05	29.788	63.7	29.880	29.786	...	45.5	41.	223	210	3.2	1.0	N., NE.
	16	20.2	759.70	29.809	65.	29.900	29.802	...	46.2	41.5	226	215	2.5	1.0	N., NE.
	17	...	...	*29.835	...	...	*29.832	...	47.5	44.7	280	185	1.6	1.0	N., NE.
	18	19.	761.00	29.866	65.5	29.960	29.861	...	46.	43.9	277	190	1.8	1.0	N., raining, NE.
	19	18.3	761.25	29.879	64.5	29.978	29.882	...	47.	44.	270	200	1.7	1.0	N., NE.
	20	16.7	761.70	29.905	62.	29.990	29.900	...	47.5	43.5	253	200	1.5	1.0	N., NE.
	21	15.9	761.70	29.909	60.4	29.990	29.904	...	47.5	43.	242	200	1.0	1.0	N., NE.
	22	15.3	761.70	29.912	59.	29.990	29.908	...	47.	42.	226	190	1.3	1.0	N., NE.
	23	...	...	...	...	...	...	...	...	...	...	...	...	1.0	N., NE.

* Supplied.

Observed dew point: 15h., 39°.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1942.]

[97]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygt., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
11	0	759.60	29.832	57.5	29.900	29.823	....	54.2	.385	89.	90	..	..	1.0	N., raining.
	1	759.55	29.823	58.3	29.884	29.804	....	53.	.378	89.1	75	..	..	1.0	N.
	2	759.60	29.806	62.2	29.896	29.806	....	52.1	.360	89.	56	..	..	.7	Cu.
	3	759.70	29.797	67.	29.904	29.801	....	51.8	.358	89.2	54	..	..	.3	Cu.
	4	759.70	29.802	69.	29.904	29.795	....	50.5	.344	91.	55	..	..	..	Clear.
	5	760.00	29.816	68.5	29.922	29.815	....	49.5	.332	90.	53	..	..	..	A few Cu.
	6	760.00	29.816	68.3	29.923	29.816	....	52.7	.355	86.	55	..	..	..	Clear.
	7	760.60	29.837	68.8	29.945	29.836	74.	57.5	.363	81.	55	..	..	..	Clear.
	8	761.00	29.850	70.	29.962	29.851	79.2	58.5	.378	79.2	140	.8	..	..	A few Ci.
	9	761.30	29.864	70.4	29.970	29.858	88.	59.5	.365	..	140	1.5	..	.1	Ci., Cu.
	10	761.70	29.878	71.	29.984	29.870	90.	61.4	.338	69.5	140	1.3	..	..	Clear.
	11	761.70	29.877	71.	29.976	29.870	86.	62.	.293	65.	160	.6	..	..	Clear.
	12	761.50	29.868	71.	29.976	29.862	88.5	64.3	.260	59.3	150	1.5	..	..	Clear.
	13	761.35	29.862	71.4	29.962	29.847	89.	66.5	.263	55.	120	1.0	..	..	Clear.
	14	760.90	29.842	71.7	29.950	29.835	94.	68.	.250	51.	145	.6	..	..	Clear.
	15	760.85	29.840	72.	29.944	29.827	96.5	69.	.244	50.	140	1.0	..	.1	A few Ci.
	16	760.90	29.842	72.	29.950	29.833	....	69.5	.215	50.	120	.6	..	..	A few Ci. at Hor.
	17	760.90	29.842	71.8	29.950	29.833	....	69.5	.277	48.5	120	.1	..	..	Clear.
	18	760.90	29.842	72.	29.950	29.833	....	66.5	.325	50.	120	.2	..	..	Clear.
	19	761.00	29.850	71.4	29.950	29.835	....	61.5	.317	54.	105	..	..	..	Clear.
	20	761.20	29.860	70.7	29.962	29.850	....	57.7	.285	58.	105	..	..	..	Clear.
	21	761.40	29.871	69.7	29.976	29.866	....	56.7	.310	58.	105	..	..	..	Clear.
	22	761.65	29.884	68.4	29.972	29.865	....	57.2	.264	59.9	175	..	..	..	Clear.
	23	761.90	29.897	67.6	29.984	29.880	....	55.	.269	61.5	175	..	..	..	Clear.

Observed dew point: 3h., 48° 5; 9h., 48° 3; 15h., 34°.

934

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

APRIL.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gauges &c.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
12	0	762.00	29.904	66.	29.990	29.889	45.8	53.	46.6	.259	61.	175	..	..	..	Clear.
	1	762.80	29.939	64.9	30.018	29.920	43.7	52.2	44.8	.228	60.8	175	..	..	..	Clear.
	2	762.75	29.937	64.	30.014	29.919	..	50.	42.2	.196	64.5	175	..	..	.6	Cl-s.
	3	762.60	29.916	66.2	30.014	29.913	..	48.5	45.	.275	76.5	175	..	..	.5	Cl-s.
	4	763.65	29.912	69.5	30.016	29.906	..	45.7	43.5	.274	79.	175	..	..	.4	Cl-s.
	5	762.90	29.923	70.2	30.032	29.921	..	45.2	42.4	.255	80.5	175	..	..	.8	Cl cu., Cl s.
	6	763.25	29.940	69.8	30.035	29.934	..	47.5	44.3	.271	78.	175	..	..	.8	Cl cu., Cl-s.
	7	763.60	29.957	69.3	30.050	29.940	..	50.3	46.	.277	76.	175	..	..	.6	Cl cu., Cl-s.
	8	763.90	29.963	70.	30.070	29.959	..	54.8	47.	.248	66.	175	..	..	.4	Cl.
	9	763.90	29.956	72.2	30.070	29.953	..	57.7	47.2	.221	60.	220	..	..	..	Clear.
	10	764.00	29.956	73.3	30.070	29.950	92.5	59.	47.5	.214	57.7	200	..	..	..	A few Cl.
	11	763.40	29.933	74.	30.050	29.928	95.	60.8	50.3	.259	59.2	235	..	..	.4	Cl, Cl cu.
	12	762.65	29.913	74.7	30.024	29.901	..	62.5	51.	.255	57.6	200	..	..	.9	Cl-s., Cl cu., Cl.
	13	763.00	29.978	74.2	30.000	29.878	..	63.	52.	.275	58.5	320	..	..	.7	Cl-s., Cl cu., Cl., W.
	14	761.05	29.838	75.3	29.960	29.834	..	64.	52.3	.271	59.	300	..	..	.9	Light Cl., Cl cu., W.
	15	761.00	29.837	75.5	29.958	29.832	..	65.5	53.7	.289	58.	260	..	..	.9	Light Cl., Cl cu., W.
	16	760.35	29.814	75.2	29.940	29.815	..	64.	52.4	.273	59.	260	..	..	1.0	Cl, Cl cu., Cl-s., W.
	17	761.25	29.852	74.7	29.968	29.845	..	62.	52.5	.299	63.	260	..	..	1.0	Cl, Cl cu., Cl-s., W.
	18	761.25	29.855	74.	29.968	29.846	..	60.5	53.8	.349	64.	260	..	..	1.0	Cl cu., N.
	19	761.25	29.857	73.	29.970	29.851	..	59.2	54.	.369	70.5	260	..	..	1.0	Cl cu., N.
	20	761.60	29.877	71.	29.964	29.870	..	56.5	51.	.323	71.	345	..	..	1.0	N., drizzling.
	21	761.50	29.876	69.7	29.960	29.870	..	54.	48.5	.292	73.5	310	..	..	1.0	N., drizzling.
	22	761.60	29.885	68.	29.963	29.870	..	57.5	47.5	.297	77.	330	..	..	1.0	N., drizzling.
	23	761.40	29.879	67.2	29.976	29.873	..	50.5	47.	.297	80.	330	1.0	N., drizzling.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

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Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gausseur's.	Wind.		Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.		
13	0	761.40	29.882	65.3	29.978	29.879	....	47.5	46.	.309	245	..	1.0	N., drizzling.
	1	761.60	29.893	64.5	29.986	29.890	....	47.	45.5	.303	320	..	1.0	N., drizzling.
	2	762.00	29.912	63.	30.000	29.907	....	46.5	45.	.297	285	..	.03	N., raining.
	3	761.90	29.912	62.	29.988	29.898	....	45.5	45.	.308	250	..	.03	N., raining.
	4	762.00	29.916	61.3	29.991	29.906	....	45.	44.	.293	220	..	.04	N., raining.
	5	762.45	29.936	60.2	30.018	29.933	....	45.5	43.5	.276	280	..	.01	N., raining.
	6	762.85	29.952	59.5	30.024	29.941	....	45.3	43.	.267	260	.1	1.0	N., raining.
	7	762.85	29.960	58.2	30.030	29.951	....	45.2	42.3	.253	260	.3	1.0	Cu., Ci-s.
	8	763.25	29.979	57.	30.046	29.970	....	44.3	41.5	.247	260	1.5	1.0	Ci-s.
	9	763.30	29.983	56.2	30.050	29.976	....	44.5	41.5	.245	265	.6	1.0	N., slight rain.
	10	763.35	29.988	55.	30.054	29.983	....	44.2	41.7	.253	245	.3	1.0	N., slight rain.
	11	763.10	29.980	54.2	30.044	29.976	....	44.	42.7	.275	245	.2	1.0	N., rain.
	12	763.50	29.959	54.	30.020	29.952	....	44.9	43.7	.287	245	.3	1.0	N.
	13	761.75	29.930	53.1	29.992	29.926	....	45.6	44.6	.299	245	1.0	1.0	N.
	14	761.25	29.911	53.	29.970	29.904	....	45.6	44.7	.301	270	.7	1.0	N., rain.
	15	760.90	29.897	53.	29.957	29.891	....	45.5	44.6	.300	280	1.5	1.0	N., drizzling.
	16	760.75	29.886	53.2	29.950	29.884	....	44.6	43.8	.293	280	.8	1.0	N., drizzling.
	17	760.40	29.864	54.8	29.936	29.865	....	44.5	43.7	.292	275	.9	1.0	N., drizzling.
	18	760.30	29.847	58.5	29.932	29.852	....	43.6	43.	.286	275	.8	1.0	N., drizzling.
	19	761.40	29.882	61.8	29.968	29.880	....	43.5	42.5	.277	275	.4	1.0	N., drizzling.
	20	761.00	29.864	63.6	29.956	29.862	....	43.	42.5	.282	275	.4	1.0	N., drizzling.
	21	760.70	29.846	65.8	29.948	29.847	....	43.	42.5	.282	275	.2	1.0	N., drizzling.
	22	760.80	29.843	68.1	29.950	29.844	....	43.2	42.6	.281	245	.1	1.0	N., raining.
	23	769.85	29.805	69.8	29.918	29.807	....	42.8	42.1	.276	210	.1	1.0	N., drizzling.

Observed dew point: 3h., 44° 5; 9h., 40° 8; 15h., 43° 8; 21h., 38°.

APRIL.]

DAILY MÉTÉOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Sausures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
811															
14	0	21.1	759.50	29.797	69.3	29.896	...	42.7	42.	.275	215	..	.01	1.0	N., rain.
	1	20.9	758.90	29.775	68.4	29.864	...	43.	42.2	.276	214	..	.04	1.0	N., rain.
	2	20.6	757.95	29.759	68.	29.834	...	42.6	41.8	.272	91.8	.1	.02	1.0	N.
	3	20.	758.15	29.749	67.	29.842	...	41.5	40.5	.253	91.	1.0	.03	1.0	N., rain.
	4	19.7	757.90	29.742	66.1	29.842	...	40.7	39.7	.251	90.9	.4	.02	1.0	N., rain.
	5	20.2	758.50	29.762	66.2	29.856	...	41.	39.8	.249	90.5	.2	.01	1.0	N., rain.
	6	20.4	758.75	29.772	66.8	29.870	...	41.	39.8	.249	90.6	.1	.03	1.0	N., rain.
	7	20.8	759.35	29.792	67.5	29.890	...	41.3	40.	.249	90.8	..	.05	1.0	N., rain.
	8	20.7	760.00	29.819	67.7	29.922	...	42.	40.5	.252	90.4	..	.04	1.0	N., rain.
	9	20.4	760.35	29.835	67.4	29.932	...	42.6	41.2	.260	89.	..	..	1.0	N., Ci-cu., Ci-s.
	10	20.3	760.35	29.835	67.1	29.930	...	44.5	42.5	.266	87.	..	..	1.0	N., Ci-cu., Ci-s.
	11	20.5	760.10	29.834	67.1	29.924	...	48.7	45.	.273	81.	.2	..	.9	N., Ci-cu., Ci-s.
	12	20.	759.70	29.810	67.6	29.912	...	51.5	45.3	.249	71.5	.3	..	.5	N., Ci-cu., SW.
	13	21.	759.60	29.802	68.	29.904	...	55.	48.	.271	67.	.4	..	.4	N., Ci-cu., (1) NW., (2) SW.
	14	21.7	759.10	29.778	68.5	29.885	...	58.5	48.3	.238	58.	..	..	.4	N., Ci-cu., NW.
	15	21.5	758.85	29.770	69.	29.870	...	59.7	48.	.216	56.	1.0	..	.6	N., Ci-cu., NW.
	16	21.4	759.20	29.783	69.	29.878	...	60.5	49.5	.244	53.	..	..	.2	N., Ci-cu., NW.
	17	21.6	759.50	29.795	69.	29.890	...	60.3	49.5	.244	53.	100	.2	.2	N., Ci-cu., NW.
	18	21.3	759.90	29.812	69.	29.920	...	57.5	47.5	.229	53.5	100	.3	.1	N., Ci-cu., NW.
	19	20.3	759.80	29.813	67.7	29.914	...	54.5	47.	.252	59.	..	..	.1	N., Ci-cu., NW.
	20	19.5	760.90	29.861	66.2	29.968	...	52.	46.5	.268	64.	..	..	.9	N., Ci-cu., NW.
	21	....	....	*29.885	....	*29.871	...	*50.4	....	*.268	*67.9	..	..	..	N., Ci-cu., W.
	22	19.3	761.80	29.897	66.4	29.984	...	50.5	46.6	.288	71.2	..	..	1.0	N., Ci-cu., W.
	23	19.2	762.45	29.922	65.	30.010	...	52.	47.3	.284	130	..	..	1.0	N., Ci-cu., W.

* Supplied.

Observed dew point: 3h., 40°; 9h., 40°; 15h., 33°; 21h., 33°.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

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Data.		Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygt., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
15	0	21.1	763.00	29.934	67.1	30.030	29.927	...	51.4	44.5	230	65.8	207	...	...	1.0	Cu., Ci-cu., aurora.
	1	21.7	763.10	29.935	68.8	30.038	29.929	...	49.8	44.7	.253	67.	205	...	...	1.0	Cu., Ci-cu., aurora.
	2	21.9	763.10	29.934	69.5	30.038	29.928	...	49.2	44.1	.247	67.5	205	...	...	1.0	Cu., Ci-cu., aurora.
	3	21.7	763.50	29.951	69.8	30.050	29.939	...	46.7	42.	.229	73.2	205	...	...	.6	Ci-cu., aurora.
	4	20.8	763.56	29.955	68.8	30.052	29.943	...	46.	42.5	.248	76.	205	...	...	1.0	Cu., Ci-cu., aurora.
	5	21.3	763.65	29.959	68.2	30.060	29.954	...	45.	42.	.249	75.	205	...	...	1.0	Cu., Ci-cu., aurora.
	6	20.7	764.10	29.980	67.8	30.070	29.964	...	41.	37.	.192	82.5	205	...	...	.4	Ci-cu., aurora.
	7	20.	764.90	30.015	67.	30.100	29.997	...	48.	43.7	.252	75.	205	...	...	...	Clear.
	8	21.	765.00	30.013	67.2	30.108	30.005	...	52.8	46.7	.264	72.	205	...	...	...	Clear.
	9	21.7	764.80	30.003	68.5	30.110	30.003	80.	55.1	48.	.269	68.3	35	...	...	...	Clear.
	10	22.	764.80	30.002	70.	30.108	29.997	80.	57.	47.	.225	61.	35	...	...	.1	Cu., NW.
	11	22.1	764.30	29.981	70.6	30.090	29.978	82.	58.	46.7	.206	57.	85	...	...	.1	Cu., NW.
	12	22.2	763.85	29.962	70.8	30.072	29.959	82.	59.5	48.3	.227	58.	60	...	...	.1	Cu., WNW.
	13	22.1	763.50	29.949	70.3	30.060	29.948	79.3	61.	50.5	.262	59.	30	1.0	...	.4	Ci., Cu., (1) W., (2) WNW.
	14	22.	762.80	29.923	70.6	30.032	29.920	79.5	61.6	50.	.243	58.	40	2.2	...	.3	Ci., Cu., WNW.
	15	22.1	762.60	29.914	70.7	30.023	29.910	79.	62.1	50.3	.245	58.	40	2.4	...	.3	Ci., Cu., WNW.
	16	22.	762.00	29.891	70.5	30.000	29.888	...	62.	51.	.263	59.	25	2.7	...	.1	Ci., Cu.
	17	22.1	761.70	29.878	70.4	29.988	29.876	...	61.1	51.	.273	60.	10	2.8	...	.1	Ci., Cu.
	18	21.2	761.80	29.888	70.	29.991	29.880	...	57.	50.	.295	65.2	20	1.8	...	1.0	Ci., Cu., Ci cu.
	19	21.	762.00	29.895	69.	30.000	29.891	...	55.5	50.	.311	65.2	20	...	...	1.0	Cu., Ci-cu.
	20	20.	762.40	29.916	67.3	30.017	29.914	...	53.5	49.	.311	67.	5	...	...	1.0	Cu., Ci-cu.
	21	19.4	762.40	29.919	66.7	30.017	29.915	...	53.	49.5	.327	70.	5	...	...	1.0	Cu., Ci cu.
	22	19.	763.15	29.950	65.7	30.045	29.947	...	52.9	48.4	.303	73.2	135	...	...	1.0	Cu.
	23	18.8	763.50	29.964	64.8	30.054	29.956	...	53.9	50.	.331	76.	140	...	...	.3	Ci-s., Cu.

Observed dew point: 3h., 34°; 9h., 37° 3; 15h., 46° 8.

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

April.]

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Baume's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.						
16	0	18.	764.50	30.009	64.	30.084	29.989	...	50.2	45.2	260	73.3	180	...	.7	Cu., N.
	1	17.4	765.00	30.030	62.7	30.106	30.015	...	48.4	44.6	267	75.5	178	...	.8	Cu., N.
	2	16.2	765.40	30.033	61.	30.124	30.037	...	45.	42.5	260	80.9	179	...	1.0	Cu.
	3	18.3	765.60	30.050	62.	30.140	30.050	...	43.7	40.	222	83.6	200	...	1.0	N.
	4	18.7	762.20	30.038	63.4	30.175	30.081	...	43.2	39.4	216	80.	250	...	.9	Cl., S.
	5	19.3	766.75	30.092	64.2	30.184	30.098	...	43.4	39.4	213	79.2	206	...	.8	Cl.-s., Ci-cu.
	6	19.5	767.30	30.112	65.	30.200	30.102	...	43.5	39.5	213	78.	200	...	.9	Cl.-s., Ci-cu.
	7	19.6	767.50	30.119	65.	30.218	30.120	...	44.2	40.3	223	76.	200	...	1.0	Cl.-s., Ci-cu.
	8	20.	768.35	30.151	66.	30.240	30.140	...	45.	41.2	233	74.	190	...	1.0	Cl.-s., Ci-cu.
	9	20.2	768.30	30.147	66.	30.250	30.148	...	47.5	41.3	206	71.5	200	...	.8	Cl., Ci-cu., W.
	10	19.5	768.59	30.159	66.	30.268	30.156	...	49.	41.8	199	68.	220	...	.9	Cl., Ci-cu., W.
	11	20.1	768.60	30.160	66.	30.260	30.158	...	51.3	43.	198	65.	225	...	.9	Cl., Ci-s., W.
	12	19.	768.45	30.159	67.	30.252	30.148	...	52.8	44.3	210	63.	215	...	.9	Cl., Ci-s., W.
	13	20.7	768.40	30.149	67.	30.250	30.146	...	53.7	46.	238	63.3	250	...	.8	Light Cl., W.
	14	21.2	768.10	30.185	68.	30.237	30.130	...	54.5	45.5	217	63.	260	...	.7	Light Cl., W.
	15	21.7	767.85	30.122	68.4	30.230	30.122	...	56.4	47.9	250	64.3	320	...	.4	Light Cl., W.
	16	22.	767.90	30.123	69.	30.230	30.121	...	56.2	47.	282	62.	305	...	.5	Light Cl., Ci-cu., W.
	17	21.9	767.90	30.123	69.5	30.230	30.120	...	55.3	46.7	235	63.2	255	...	.1	A few Cu.
	18	21.4	768.30	30.142	69.4	30.245	30.135	...	53.3	48.	289	66.5	255	...	.8	Cl., Ci-cu.
	19	21.	768.80	30.143	69.	30.245	30.136	...	51.	47.	291	67.	255	...	.4	Cl., Ci-s.
	20	18.7	768.85	30.177	66.3	30.268	30.166	...	48.8	43.5	239	72.	205	...	.4	Cl., Ci-s.
	21	18.4	769.00	30.183	64.8	30.264	30.166	...	51.7	41.8	168	71.3	349	...	.9	Cl., Ci-s., Ci-cu.
	22	16.1	769.00	30.184	63.9	30.266	30.171	...	46.4	37.	131	70.4	355	...	.9	Cl., Ci-s., Ci-cu.
	23	...	...	...	...	...	...	...	...	...	...	...	355	...	..	..

Observed dew point: 3h., 35°; 9h., 31°; 15h., 36° 7.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

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Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
18	0 12.	763.70	30.006	52.	30.068	30.005	...	41.6	40.6	.259	90.5	249	4.5	.06	1.0 N., rain.
	1 15.2	763.50	29.982	54.7	30.056	29.987	...	41.4	40.5	.259	91.8	240	6.0	.02	1.0 N., rain.
	2 17.7	763.05	29.953	59.1	30.034	29.952	...	41.6	40.6	.259	92.	230	7.7	.02	1.0 N., rain.
	3 18.5	762.65	29.933	62.2	30.026	29.936	...	42.	41.4	.272	92.6	240	4.0	.02	1.0 N., rain.
	4 17.8	762.10	29.915	63.	30.008	29.915	...	42.1	41.5	.273	91.9	255	5.8	.04	1.0 N., rain.
	5 18.1	762.75	29.940	63.	30.026	29.933	...	42.5	42.5	.288	92.2	265	6.0	.01	1.0 N., rain.
	6 19.	763.15	29.950	61.	30.040	29.945	...	42.7	42.6	.298	92.2	262	5.0	.01	1.0 N., rain.
	7 20.	762.70	29.928	65.6	29.954	29.855	...	42.9	42.9	.292	92.	248	5.0	.01	1.0 N., rain.
	8 20.	762.85	29.926	66.1	30.010	29.909	...	43.	...	.284	91.9	239	5.5	.01	1.0 N., rain.
	9 19.1	762.55	29.926	66.	30.026	29.925	...	43.8	42.6	.276	91.3	255	6.0	...	1.0 N., rain.
	10 19.7	762.75	29.932	66.	30.030	29.929	...	44.2	43.	.280	91.	255	4.5	.01	1.0 N.
	11 19.7	762.80	29.928	68.	30.027	29.926	...	44.2	43.5	.285	90.5	255	6.0	...	1.0 N.
	12 18.7	762.55	29.929	65.5	30.021	29.925	...	45.2	43.6	.282	89.5	250	5.5	...	1.0 N.
	13 18.5	761.70	29.896	65.5	29.990	29.891	...	44.8	43.3	.290	90.7	250	4.2	...	1.0 N.
	14 18.5	761.70	29.896	64.2	29.992	29.897	...	45.	43.7	.287	91.3	250	4.3	...	1.0 N.
	15 18.4	761.90	29.905	64.	30.000	29.905	...	44.6	43.8	.293	92.7	250	2.0	...	1.0 N., drizzling.
	16 19.5	761.30	29.876	65.	29.930	29.882	...	43.5	43.	.287	93.5	250	1.8	...	1.0 N., drizzling.
	17 19.	761.00	29.866	65.1	29.958	29.860	...	44.5	42.5	.277	92.2	250	2.5	...	1.0 N., drizzling.
	18 18.7	760.80	29.881	64.5	29.952	29.866	...	43.8	43.	.284	94.	250	1.8	...	1.0 N., drizzling.
	19 18.3	760.90	29.866	64.	29.956	29.861	...	44.	43.	.282	92.2	235	2.0	...	1.0 N., drizzling.
	20 18.7	760.90	29.865	63.	29.976	29.863	...	43.5	43.	.287	92.	235	2.2	.01	1.0 N., drizzling.
	21 18.	760.00	29.832	63.5	29.918	29.821	...	43.	42.3	.278	92.	240	2.5	.01	1.0 N., drizzling.
	22 17.5	760.50	29.854	63.7	29.930	29.838	...	43.1	42.2	.275	91.4	234	3.0	.01	1.0 N., drizzling.
	23 17.2	759.40	29.811	63.	29.892	29.799	...	42.6	41.8	.272	92.5	243	2.7	.02	1.0 N., rain.

* Supplied.

Observed dew point: 9h., 41° 8; 15h., 43° 3; 21h., 39° 2.

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

APRIL.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.	
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.				
19	0	17.9	759.00	29.793	62.2	29.872	29.782	...	42.	41.2	.267	93.	255	2.5	.03	1.0	N., drizzle.
	1	18.5	758.25	29.760	62.8	29.840	29.747	...	41.8	41.	.265	91.5	250	1.8	.02	1.0	N., drizzle.
	2	19.1	757.70	29.736	63.5	29.824	29.730	...	41.5	40.7	.262	90.8	250	1.2	.01	1.0	N.
	3	19.8	757.70	29.734	65.2	29.808	29.710	...	41.5	40.8	.263	91.	245	.8	..	1.0	N., drizzle.
	4	19.2	756.85	29.702	65.	29.800	29.702	...	41.2	40.5	.261	88.	260	1.0	..	1.0	N., drizzle.
	5	19.	756.35	29.683	64.7	29.774	29.678	...	40.7	40.3	.268	92.2	240	.8	..	1.0	N., drizzle.
	6	18.3	755.90	29.669	64.	29.760	29.665	...	41.	40.5	.263	92.5	235	.3	..	1.0	N., drizzle.
	7	17.5	756.00	29.676	62.8	29.766	29.673	...	41.5	40.7	.262	92.	260	.7	..	1.0	N., drizzle.
	8	16.8	756.40	29.696	61.5	29.748	29.680	...	42.3	41.5	.270	92.	260	1.2	..	1.0	N., drizzle.
	9	16.8	755.20	29.649	61.	29.730	29.644	...	42.5	41.7	.272	92.	240	.7	..	1.0	N., drizzle.
	10	16.1	754.75	29.636	60.3	29.710	29.626	...	43.	42.1	.274	91.7	241	1.2	..	1.0	N., drizzle.
	11	16.7	753.95	29.601	60.2	29.672	29.589	...	43.7	42.9	.283	92.	230	1.0	..	1.0	N., drizzle.
	12	18.1	753.60	29.581	61.8	29.668	29.580	...	44.6	43.8	.293	91.9	235	.8	..	1.0	N., drizzle.
	13	17.7	752.80	29.551	62.	29.642	29.554	...	45.3	44.5	.300	92.	235	.5	.02	1.0	N., drizzle.
	14	18.5	752.75	29.545	63.	29.636	29.545	...	46.2	45.3	.308	92.	240	.3	.07	1.0	N., drizzle.
	15	19.	752.10	29.517	64.	29.610	29.516	...	45.7	45.1	.309	92.2	250	..	.13	1.0	N., drizzle.
	16	19.	752.10	29.517	64.5	29.614	29.519	...	46.6	45.6	.310	91.5	230	.1	.08	1.0	N., drizzle.
	17	19.	752.60	29.538	64.8	29.633	29.537	...	47.3	46.3	.318	91.5	200	..	.01	1.0	N., drizzle.
	18	19.	752.00	29.514	61.2	29.610	29.516	...	46.6	46.	.319	93.5	190	..	.01	1.0	N., drizzle.
	19	20.	752.60	29.533	65.	29.634	29.538	...	47.	46.5	.326	92.5	240	..	.03	1.0	N.
	20	20.7	753.00	29.545	67.	29.646	29.544	...	49.5	46.8	.304	92.5	250	..	..	1.0	N.
	21	20.8	753.00	29.543	67.2	29.646	29.544	...	47.5	47.	.331	92.	250	..	..	1.0	N.
	22	21.6	753.30	29.552	68.1	29.646	29.542	...	47.7	47.	.329	91.7	250	..	..	1.0	N.
23	21.6	753.30	29.552	69.	29.650	29.543	...	47.9	47.2	.331	91.2	250	..	..	1.0	N.	

Observed dew point: 3h., 39°; 9h., 39°; 6; 15h., 44°; 9; 21h., 47°.

APRIL.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

942

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
20	0	21.3	753.50	29.562	69.	29.664	...	47.6	46.9	.328	92.	174	...	.03	1.0	N., raining.
	1	21.3	753.65	29.568	69.	29.670	...	47.7	46.9	.327	92.3	157	...	.01	1.0	N.
	2	20.8	754.15	29.566	69.5	29.688	...	47.7	47.	.329	92.1	97	...	...	1.0	N.
	3	22.6	754.30	29.588	70.	29.696	...	48.	47.4	.335	92.2	90	...	...	1.0	N.
	4	22.	754.65	29.605	70.	29.710	...	48.	47.3	.333	92.	60	...	...	1.0	N.
	5	21.4	754.90	29.618	69.6	29.723	...	48.	47.4	.335	92.2	60	...	...	1.0	N.
	6	20.6	755.70	29.651	68.5	29.754	...	49.5	47.8	.338	92.5	60	...	...	1.0	N.
	7	21.	756.15	29.667	68.	29.769	...	50.8	48.7	.334	89.	140	...	...	1.0	N.
	8	21.	756.80	29.693	68.5	29.800	...	52.2	49.4	.335	84.3	170	...	...	1.0	Cu.
	9	22.	757.35	29.709	69.5	29.820	...	54.	50.	.328	80.	150	...	...	.4	Cu., Ci., Ci-cu., (1) N., (2) W.
	10	23.	757.90	29.726	70.8	29.838	...	56.5	52.	.350	79.	160	...	...	.5	Cu., Ci., Ci-cu., (1) N., (2) W.
	11	23.2	758.10	29.731	72.	29.850	...	58.	53.2	.337	75.	160	...	...	.8	Cu., N.
	12	23.5	758.45	29.744	72.7	29.862	...	58.	52.2	.337	74.3	160	...	...	.9	Cu., N.
	13	23.	758.60	29.753	72.6	29.870	...	57.5	51.5	.327	74.	150	...	...	1.0	Cu., N.
	14	23.	758.60	29.753	72.2	29.870	...	58.5	51.7	.321	72.	140	...	...	1.0	Cu., N.
	15	23.	758.70	29.757	72.	29.872	...	59.3	52.6	.334	72.	140	...	...	.5	Cu., N.
	16	23.	759.00	29.768	72.	29.880	...	60.6	52.6	.320	68.	155	...	...	.1	Cu. in Hor.
	17	23.3	759.30	29.778	72.2	29.874	...	63.1	56.5	.391	66.	120	...	...	.6	Cu., Ci.
	18	23.4	759.65	29.792	72.2	29.907	...	62.3	56.	.387	70.	95	...	...	.3	Cu., Ci.
	19	23.	760.00	29.808	72.	29.924	...	57.	53.5	.382	78.	65	...	...	.1	Ci-s., Ci.
	20	22.	760.50	29.833	71.	29.950	...	54.4	51.	.348	81.	65	...	...	...	Clear.
	21	21.3	760.60	29.840	70.	29.948	...	53.5	50.	.334	81.	50	...	...	...	Clear.
	22	20.5	761.15	29.864	68.6	29.950	...	50.4	48.4	.339	82.	48	...	...	...	Clear.
	23	19.8	761.70	29.891	67.2	29.980	...	50.2	47.8	.319	83.6	47	...	...	...	Clear.

Observed dew point: 3h., 46°.5; 15h., 46°.5; 21h., 44°.6.

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

APRIL.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.		Dir., degrees.	Force, lbs.			
21	0 19.	761.90	29.901	65.9	29.982	29.881	....	51.1	.272	125	..	..	.3	Cl-s., Cl-cu.
	1 18.5	762.20	29.915	64.8	30.000	29.902	....	51.	.273	140	..	..	.2	Cl-s., Cl-cu.
	2 18.	762.25	29.920	63.7	30.000	29.906	....	50.5	.265	155	..	..	..	Clear.
	3 17.	762.65	29.941	62.2	30.024	29.934	....	49.5	.263	230	..	..	..	Clear.
	4 16.5	763.15	29.963	61.3	30.046	29.958	....	48.3	.255	230	.5	..	..	Clear.
	5 15.5	763.65	29.986	59.8	30.068	29.983	....	47.	.259	83.	.4	..	..	Clear.
	6 18.4	764.60	30.011	60.	30.080	29.995	....	49.3	.272	240	..	..	..	Clear.
	7 20.6	765.80	30.047	60.3	30.150	30.064	....	51.2	.282	240	..	..	..	Clear.
	8 22.6	767.00	30.085	68.	30.184	30.078	....	53.2	.221	77.	.3	..	..	Clear.
	9 22.8	766.85	30.079	70.	30.188	30.077	87.3	54.6	.296	76.	2	..	.3	Cl., N.
	10 22.5	767.20	30.093	70.5	30.204	30.092	94.	56.9	.323	74.3	..	..	.4	Cl., N.
	11 22.2	767.20	30.094	70.5	30.205	30.093	93.6	59.1	.320	71.	..	..	.1	Cl., N.
	12 22.	766.75	30.079	70.4	30.186	30.074	96.	60.5	.355	72.3	..	..	.1	Cl. in Hor.
	13 22.	766.80	30.081	70.2	30.190	30.079	97.	62.5	.372	72.	..	..	.2	Cl., N.
	14 22.	766.50	30.069	70.3	30.188	30.076	99.	63.	.380	70.5	..	..	.3	Cl., Cu., N.
	15 22.	766.05	30.051	70.3	30.160	30.048	96.	64.	.376	70.3	..	..	.4	Cl., Cu., N.
	16 22.	765.85	30.043	70.2	30.150	30.039	....	65.2	.401	290	..	..	.3	Cl., Cu., N.
	17 22.2	765.60	30.031	70.5	30.140	30.028	....	64.8	.386	68.	..	..	.3	Cl., N.
	18 21.7	765.40	30.026	70.1	30.133	30.022	....	61.9	.398	270	..	..	.4	A few Cl., N.
	19 21.3	765.45	30.030	70.	30.134	30.023	....	61.5	.382	72.	..	..	.2	Cl., Cl-s.
	20 20.	765.50	30.038	68.5	30.135	30.028	....	54.3	.831	300	.2	..	.3	Cl., Cl-s.
	21 19.4	766.10	30.065	66.8	30.162	30.059	....	53.5	.833	82.	..	..	.2	Cl., Cl-s.
	22 18.1	765.80	30.060	64.8	30.146	30.048	49.	50.6	.346	83.9	..	..	.1	Cl., Cl-s.
	23 18.1	765.50	30.048	64.	30.134	30.039	47.5	49.	.339	16	..	..	.1	Cl., Cl-s.

Observed dew point: 15h., 49° 5.

APRIL.] DAILY METEOROLOGICAL OBSERVATIONS. [1842.

Day.	Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Saunures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temp., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
22	0	17.3	765.15	30.037	63.	30.128	30.035	45.9	48.5	46.5	.309	16	..	..	..	Clear.
	1	17.1	764.90	30.029	62.1	30.120	30.030	46.	47.7	46.6	.317	16	..	..	..	Clear.
	2	17.3	764.10	29.995	61.2	30.108	30.021	45.8	47.5	46.5	.320	17	..	..	..	Clear.
	3	..	..	*29.974	..	..	*29.995	..	*47.2	..	*.324	15	..	..	..	..
	4	..	..	*29.982	..	..	*29.995	..	*46.6	..	*.322	15	..	..	..	..
	5	..	..	*29.964	..	..	*29.967	..	*47.2	..	*.325	15	..	..	..	..
	6	14.7	763.30	29.977	57.7	30.048	29.969	..	48.	47.	.326	15	..	..	..	Clear.
	7	15.	763.25	29.973	57.8	30.050	29.971	..	51.3	49.6	.319	30	..	..	..	Clear.
	8	15.5	763.20	29.968	58.5	30.044	29.964	..	54.2	51.7	.368	45	..	..	..	Clear.
	9	16.	762.75	29.919	59.5	30.030	29.947	82.	58.1	55.2	.413	25	..	..	..	Clear.
	10	16.5	762.40	29.934	60.	30.018	29.933	83.	60.5	56.9	.432	25	..	..	..	Clear.
	11	17.	761.70	29.904	61.	29.988	29.901	90.	65.3	59.8	.458	30	.2	..	..	Clear.
	12	18.6	761.00	29.868	62.1	29.958	29.868	88.5	67.5	60.	.439	45	.4	..	..	Clear.
	13	18.6	760.20	29.837	63.6	29.928	29.834	91.3	70.3	61.7	.458	30	.7	..	..	Clear.
	14	19.2	759.30	29.798	65.	29.896	29.798	94.	72.2	62.3	.454	30	1.5	..	..	Clear.
	15	20.	759.00	29.782	65.8	29.880	29.780	92.	72.8	62.8	.462	40	1.5	..	..	Hazy.
	16	20.9	758.55	29.761	67.	29.864	29.761	..	73.8	64.1	.490	40	1.3	..	..	Hazy.
	17	21.3	758.40	29.753	68.1	29.858	29.752	..	73.7	64.2	.496	40	1.0	..	..	Band of Ci-cu. in NW.
	18	21.9	757.80	29.727	69.2	29.834	29.725	..	71.5	63.	.484	45	.6	..	..	A few scattered Cu.
	19	21.7	757.55	29.718	69.8	29.826	29.716	..	69.1	61.	.462	45	.8	..	..	Cu., Ci-c. in Hor.
	20	21.3	757.30	29.710	69.5	29.816	29.706	..	66.6	60.	.450	45	.3	..	..	Clear.
	21	21.1	757.10	29.703	69.2	29.810	29.701	..	64.5	58.6	.434	40	.2	..	..	Ci-cu. in Hor.
	22	20.8	756.80	29.692	68.9	29.784	29.675	..	63.5	58.5	.442	43	..	..	..	Ci-cu. in Hor.
	23	20.6	756.80	29.694	68.5	29.780	29.673	..	62.5	57.4	.421	42	..	..	.9	Ci., Ci-cu.

* Supplied. Observed dew point: 9h., 54°.2; 15h., 56°.5; 21h., 52°.3.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Day.	Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gausses's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
611	23	0 20.3	756.52	29.689	67.9	29.773	29.672	...	60.4	57.	.485	82.	44	...	.9	...	...
	1	20.1	756.40	29.680	67.4	29.774	29.670	...	59.3	56.2	.426	83.9	45	...	.4	...	...
	2	19.9	755.75	29.655	67.	29.750	29.647	...	58.	55.2	.414	86.6	45	...	...	...	...
	3	19.8	755.90	29.665	67.5	29.762	29.660	...	57.	55.	.420	87.	45	...	.2	...	...
	4	20.4	756.15	29.671	68.	29.770	29.669	...	56.2	54.3	.411	87.	45	...	.5	...	...
	5	20.4	756.60	29.689	68.8	29.780	29.679	...	55.5	53.8	.406	87.5	45	...	...	...	...
	6	19.4	758.00	29.747	65.2	29.826	29.728	...	57.7	55.7	.431	86.	45	...	...	...	...
	7	19.5	758.75	29.777	65.5	29.870	29.773	...	66.	60.	.456	78.	45	...	...	...	...
	8	20.	759.75	29.814	66.	29.902	29.803	...	67.3	60.	.441	73.	45	...	...	...	...
	9	20.4	760.65	29.849	66.8	29.940	29.838	...	66.4	57.4	.379	69.	175	1.3	...	...	...
	10	20.8	761.50	29.879	67.8	29.972	29.868	95.	68.5	58.5	.386	67.2	195	.3	...	...	...
	11	21.3	761.60	29.881	68.2	29.980	29.876	100.3	69.	59.	.394	66.	240	.4	...	...	...
	12	21.7	761.60	29.879	69.	29.980	29.873	96.5	69.5	58.5	.375	64.	200	.5	...	...	...
	13	22.	762.00	29.891	69.8	30.000	29.889	...	70.5	60.	.403	63.	210	.2	.2	...	...
	14	22.2	762.00	29.889	70.2	30.000	29.889	103.	70.8	60.	.400	63.	210	.2	.2	...	...
	15	23.	762.00	29.886	71.	30.000	29.886	...	71.	60.	.412	62.	170	...	.5	...	...
	16	23.2	762.35	29.896	71.7	30.016	29.901	...	71.7	61.5	.434	63.9	300	...	.5	...	...
	17	23.3	762.70	29.912	72.2	30.030	29.913	...	71.3	62.	.453	66.	290	...	.7	...	...
	18	23.	763.45	29.943	72.5	30.058	29.940	...	63.5	57.	.399	72.	300	.4	.3	...	...
	19	22.2	763.50	29.948	71.8	30.060	29.943	...	69.5	54.5	.378	76.	300	.6	.1	...	...
	20	21.	764.20	29.962	70.	30.086	29.975	54.5	51.	49.	.340	80.	240	.1	.4	...	...
	21	20.	765.00	30.018	68.2	30.120	30.014	...	52.5	49.	.321	85.	330	.2	.9	...	...
	22	19.5	766.65	30.047	67.	30.146	30.043	...	51.	48.	.315	87.	330	...	.4	...	...
	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Observed dew point: 3h., 49°.5; 9h., 46°.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

916

Date.	Barometer No. 1.				Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Dir., degrees.			Force, lbs.				
25	0	17.2	762.85	29.947	62.1	30.014	29.924	...	54.8	52.1	.370	86.7	253	..	..	9	S., Ci-a.
	1	17.2	762.35	29.927	62.	30.000	29.910	...	55.2	52.3	.371	86.5	253	..	..	1.0	Ci-a., S.?
	2	18.4	761.60	29.893	62.7	29.974	29.883	...	55.5	53.1	.388	88.8	253	..	..	1.0	Ci-a., S.?
	3	21.9	761.15	29.858	66.4	29.962	29.860	...	56.1	53.4	.388	90.2	253	..	..	1.0	S.
	4	24.	761.15	29.847	70.5	29.960	29.848	...	56.	55.	.431	91.5	253	..	..	1.0	S., slight fog.
	5	25.	761.15	29.843	72.2	29.958	29.841	...	56.1	55.1	.433	92.	253	..	..	1.0	S., dense fog.
	6	25.5	761.65	29.860	75.3	29.978	29.852	...	56.	55.1	.434	91.8	223	..	..	1.0	S., dense fog.
	7	25.1	761.50	29.857	75.3	29.968	29.842	...	56.8	55.9	.446	92.1	222	..	..	1.0	S., dense fog.
	8	25.	761.50	29.857	75.5	29.968	29.842	...	58.	56.9	.460	92.8	123	..	..	1.0	S.
	9	23.8	761.25	29.852	74.	29.964	29.842	...	62.	59.8	.495	89.7	70	..	..	1.0	Ci-a.
	10	23.2	761.00	29.847	73.2	29.958	29.839	...	64.9	61.5	.512	88.	35	..	..	1.0	Ci-a.
	11	23.	760.40	29.824	73.	29.937	29.818	...	66.5	62.7	.530	86.	30	..	..	.6	Ci-a., Ci cu., WSW.
	12	23.	760.15	29.814	72.8	29.926	29.807	88.	68.	64.2	.559	86.5	20	1.	..	.3	Ci-a., Ci cu., WSW.
	13	23.4	759.50	29.786	73.	29.906	29.787	91.	70.4	66.4	.602	85.5	20	2.	..	.1	Ci a. in Hor.
	14	23.5	758.75	29.757	73.2	29.872	29.753	94.	74.	69.	.649	82.5	20	2.	..	.1	Ci a. in Hor.
	15	24.	758.30	29.738	73.6	29.856	29.736	97.3	75.3	68.3	.611	78.	40	1.	..	.1	Ci a. in Hor.
	16	24.3	758.15	29.730	74.	29.850	29.738	...	76.8	69.2	.624	77.5	30	1.	..	.1	Ci a. in Hor.
	17	25.	757.90	29.717	75.	29.832	29.708	...	77.8	69.7	.630	76.	40	..	..	.1	Ci a. in Hor.
	18	25.2	757.40	29.697	75.8	29.812	29.686	...	75.	69.	.638	80.	40	..	..	.1	Ci-a. in Hor.
	19	25.	757.60	29.705	76.	29.820	29.694	...	73.5	68.5	.637	81.	40	..	..	.2	Ci-a. in Hor.
	20	25.	757.60	29.705	75.8	29.820	29.694	...	70.5	66.	.585	81.	40	..	..	.2	Ci-a. in Hor.
	21	....	....	*29.699	....	....	*29.689	....	*67.6	....	*.552	*81.9	40	..	..	..	Clear.
	22	24.3	756.90	29.679	75.	29.790	29.665	....	66.5	63.	.539	83.	37	..	..	..	Clear.
23	24.	756.25	29.654	74.5	29.764	29.641	....	66.1	62.5	.528	85.	15	..	..	..	Clear.	

* Supplied.

Observed dew point: 3h., 50°.4; 9h., 58°.3; 15h., 64°.8; 21h., 55°.8.

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

April.]

Day.	Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.						
26	0	23.7	756.20	29.655	74.	29.758	29.636	...	66.	62.5	539	16	...	...	...	Clear.
	1	23.2	755.55	29.633	73.2	29.744	29.626	...	64.2	61.6	523	30	...	...	...	Clear.
	2	23.	755.15	29.619	72.8	29.722	29.605	...	64.2	61.6	523	21	...	...	...	Clear.
	3	23.5	754.76	29.605	71.9	29.710	29.605	...	63.5	61.4	518	0	...	...	...	Clear.
	4	22.	754.25	29.589	71.3	29.685	29.572	...	62.3	60.7	518	2	...	...	...	Clear.
	5	21.8	754.00	29.580	70.6	29.678	29.566	...	61.9	60.5	516	2	...	...	...	Clear.
	6	21.7	754.10	29.584	70.3	29.682	29.572	...	63.7	61.7	532	10	...	...	...	Clear.
	7	22.	753.65	29.565	70.3	29.674	29.564	...	67.3	65.3	601	5	...	...	...	Clear.
	8	22.7	753.35	29.549	70.9	29.657	29.545	...	71.3	68.8	605	10	...	...	...	Clear.
	9	23.	752.90	29.531	72.	29.640	29.525	...	72.9	71.3	740	5	...	...	...	Clear.
	10	23.4	752.35	29.507	72.7	29.624	29.503	91.	72.9	71.3	729	74.	...	...	...	Clear.
	11	23.7	752.10	29.496	73.2	29.610	29.493	91.	74.5	65.5	529	78.	...	...	...	Clear.
	12	24.2	751.00	29.450	74.	29.564	29.444	94.5	76.8	66.8	556	73.	...	...	...	Clear.
	13	25.	750.20	29.414	74.6	29.532	29.411	92.5	78.	68.	571	40	...	...	...	Clear.
	14	25.3	749.00	29.365	75.3	29.484	29.361	96.	79.	66.5	570	35	...	...	...	Clear.
	15	25.7	748.40	29.341	76.	29.464	29.339	92.	79.	68.	560	35	...	...	...	Clear.
	16	25.7	748.50	29.345	76.3	29.466	29.340	...	77.7	66.6	529	35	...	...	...	Clear.
	17	25.3	748.50	29.345	76.7	29.466	29.339	...	67.5	61.	468	110	...	...	...	Clear.
	18	24.2	749.70	29.399	75.7	29.520	29.397	...	63.	59.5	476	130	...	...	...	Clear.
	19	24.1	749.70	29.399	75.1	29.520	29.398	...	62.	59.5	487	110	...	...	...	Clear.
	20	23.	750.00	29.416	72.6	29.538	29.417	...	61.	60.	512	93.	...	...	...	Clear.
	21	23.	750.20	29.424	73.	29.540	29.438	...	61.	59.5	499	340	...	...	...	Clear.
	22	22.5	749.85	29.412	72.	29.500	29.385	...	60.1	58.4	477	2	...	...	...	Clear.
	23	21.8	749.20	29.390	71.3	29.480	29.368	...	59.9	59.	496	18	...	...	...	Clear.

Observed dew point: 3h., 56°; 9h., 61°; 5h., 58°; 6h., 59°.

April.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.				Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Dir., degrees.			Force, lbs.				
27	0	21.5	749.00	29.384	70.3	29.468	29.358	...	60.	59.	.495	93.	44	.1	.01	1.0	N., raining.
	1	21.2	749.30	29.397	69.9	29.494	29.395	...	55.	53.4	.401	93.	99	.2	.07	1.0	N., raining.
	2	20.8	749.25	29.396	69.	29.486	29.379	...	55.	52.3	.374	86.8	121	.2	.04	1.0	N.
	*3	20.4	749.45	29.406	67.7	29.500	29.397	...	55.	52.	.367	84.	100	.2	..	1.0	N.
	4	...	...	+29.435	...	...	+29.432	...	+52.5	...	+	...	...	1	..	..	..
	5	19.	750.10	29.439	65.9	29.538	29.439	...	51.2	45.4	.254	72.8	95	1.7	..	.4	Cl-a, Ci-cu.
	6	18.2	750.90	29.474	64.3	29.568	29.473	...	50.5	43.6	.223	70.	115	1.2	..	..	Clear.
	7	17.8	751.60	29.503	63.3	29.568	29.476	78.	51.5	44.8	.237	68.7	100	2.0	..	..	Clear.
	8	17.7	751.15	29.485	62.9	29.570	29.479	78.8	52.1	45.3	.242	67.4	103	2.0	..	..	Clear.
	9	17.5	750.90	29.478	63.	29.560	29.469	76.5	53.8	45.8	.235	66.	80	2.3	..	..	A few small Cu.
	10	17.5	750.70	29.470	62.6	29.556	29.467	...	55.5	47.	.243	65.	75	1.8	..	.8	Cu., W.
	11	17.4	750.50	29.462	62.4	29.550	29.461	...	56.5	47.5	.244	64.	75	2.0	..	.8	Cu., W.
	12	17.2	750.00	29.443	62.	29.520	29.432	...	56.9	48.6	.265	62.7	50	2.2	..	.9	Cl., Cu., N., W.
	13	17.2	750.00	29.443	62.	29.524	29.436	...	55.8	47.5	.252	65.	70	4.2	..	.9	Cl., Cu., N., W.
	14	17.2	750.15	29.449	62.	29.532	29.444	...	58.4	47.4	.321	55.	85	2.7	.01	.8	Cl., Cu., N., W.
	15	17.2	750.30	29.455	62.	29.540	29.452	...	56.6	46.5	.320	57.5	110	3.7	..	.8	Cl., Cu., N., W.
	16	17.1	750.75	29.473	61.6	29.558	29.471	...	57.1	47.	.326	59.	100	3.0	..	.4	Cl., Cu., W.
	17	17.3	751.40	29.493	61.7	29.574	29.487	...	54.8	46.8	.346	60.	110	2.5	..	.1	Cu., W.
	18	17.	751.80	29.516	61.4	29.600	29.513	...	54.5	47.	.353	61.	110	1.5	..	.1	Cu., W.
	19	16.9	752.00	29.524	61.	29.610	29.524	...	53.5	45.5	.330	61.5	110	1.6	..	.6	Cu., Cu-s., W.
	20	16.	753.50	29.587	60.	29.658	29.575	...	48.5	42.5	.321	67.	110	2.6	..	1.0	N., W.
	21	15.3	753.90	29.607	59.	29.670	29.590	...	47.5	42.	.321	66.	110	1.5	..	1.0	N., W.
	22	14.9	753.90	29.608	58.1	29.670	29.592	...	47.5	41.8	.321	67.	110	1.5	..	.4	Cl-a.
23	14.4	754.10	29.618	57.2	29.682	29.607	...	46.3	40.6	.306	68.5	115	1.5	..	.1	Cl-a.	

* Fifteen minutes late.

† Supplied.

Observed dew point: 3h., 49°; 9h., 38°; 3, 15h., 36°; 4, 21h., 31°; 9.

APRIL.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gaussure's.	Wind.		Sky covered, 10ths.	Clouds, and direction of their strata.
	Temp., centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temp., Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.					
28	0	754.65	29.614	56.6	29.706	29.632	...	44.4	36.9	72.3	120	4	...	A few Ci.s. at S. Hor.
1	...	...	*29.664	...	...	*29.661	...	*44.1	...	*74.1	120	2	...	Clear.
2	13.3	755.00	29.659	57.	29.718	29.643	...	43.5	36.4	74.8	86	1	...	Cu. and Ci-cu. S.
3	12.7	754.40	29.638	54.	29.690	29.623	...	44.1	39.5	74.	100	1	...	Cu. and Ci-cu.
4	12.2	754.70	29.653	53.5	29.700	29.634	...	44.2	40.1	74.	96	2	...	Cu. and Ci-cu.
5	12.	754.75	29.655	52.8	29.706	29.641	...	43.1	42.4	76.	95	1	...	Cu. Ci.
6	11.8	755.15	29.671	52.2	29.728	29.663	...	44.7	39.9	74.	110	2	...	Cu. at N. and W. Hor.
7	11.8	755.30	29.677	52.1	29.730	29.668	...	46.2	41.8	70.	105	1	...	Cu.
8	12.	755.35	29.678	52.6	29.732	29.668	...	46.9	40.8	66.5	105	2	...	Cu. W. by N.
9	12.2	755.70	29.692	53.	29.756	29.691	70.8	47.5	40.7	65.5	100	3	...	Cu., W. by N.
10	12.5	755.60	29.687	53.5	29.752	29.686	74.5	49.5	41.5	64.	120	3	...	Cu., W. by N.
11	12.5	755.75	29.693	53.8	29.757	29.690	...	47.7	40.	64.5	110	3	...	Cu., Ci., N., W. by N.
12	14.7	756.00	29.691	56.	29.770	29.697	...	48.5	40.	64.	100	3	...	Cu., Ci., N., W. by N.
13	18.	756.60	29.699	60.	29.787	29.704	...	49.2	41.	63.7	100	3	...	Cu., W. by N.
14	10.3	757.00	29.708	63.2	29.800	29.708	...	49.3	41.5	63.7	100	3	...	Cu., W. by N.
15	19.4	757.00	29.707	64.3	29.800	29.704	...	49.3	41.5	64.	100	3	...	Cu., W. by N.
16	18.	757.00	29.714	63.8	29.800	29.705	...	49.5	42.5	64.8	100	3	...	Cu., W. by N.
17	18.4	757.50	29.732	63.5	29.820	29.726	...	49	42.5	65.	100	2	...	Cu., W. by N.
18	17.8	758.10	29.758	62.	29.850	29.757	...	48.	41.5	66.2	90	3	...	Cu., W. by N.
19	17.6	758.50	29.775	62.3	29.866	29.776	...	48.	41.5	66.	100	1	...	Cu., W. by N.
20	18.5	759.85	29.824	62.5	29.910	29.819	...	48.	40.5	64.	100	1	...	Cu., W. by N.
21	20.3	760.80	29.853	66.	29.950	29.852	...	46.5	40.	66.	100	3	...	Clear.
22	20.9	761.20	29.865	66.8	29.970	29.867	...	46.4	40.	68.2	100	...	...	Clear.
23	21.4	761.25	29.865	68.	29.970	29.864	...	43.	39.4	70.	100	...	...	Clear.

* Supplied.

Observed dew point: 3h, 31° 5; 9h, 29° 2; 15h, 26° 5; 21h, 39° 9.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
29	0	21.7	761.30	29.865	69.3	29.976	29.866	...	42.5	38.6	.208	73.	105	..	..	Clear.
	1	21.2	761.30	29.868	69.	29.961	29.852	...	41.5	38.	.206	76.5	74	..	..	Clear.
	2	21.2	761.25	29.866	68.7	29.964	29.857	...	41.1	36.8	.187	74.5	97	..	..	Clear.
	3	21.9	761.35	29.866	69.	29.964	29.855	...	40.5	36.4	.186	74.9	92	..	..	Clear.
	4	21.9	761.50	29.872	69.	29.990	29.881	41.1	40.1	36.5	.193	75.2	92	..	..	Clear.
	5	22.	761.85	29.886	69.5	29.980	29.870	86.	40.1	36.1	.185	75.	92	..	..	Clear.
	6	22.	762.50	29.911	69.7	30.000	29.890	...	42.7	38.	.198	73.2	78	..	.1	Cl., Cu.
	7	21.9	762.60	29.915	69.5	30.010	29.900	...	47.1	41.	.204	70.	78	..	..	Clear.
	8	22.	762.55	29.913	69.8	30.004	29.893	...	51.7	43.4	.203	66.6	92	.6	..	Clear.
	9	22.5	762.35	29.902	71.1	30.004	29.890	81.	59.8	44.5	.205	64.	105	.9	..	Clear.
	10	23.2	762.05	29.886	72.	30.002	29.865	81.5	56.5	47.2	.235	63.5	100	1.8	..	Clear.
	11	22.	761.20	29.860	71.3	29.970	29.855	80.5	57.2	47.6	.236	61.3	100	2.6	..	Cu., W. by N.
	12	21.	760.40	29.833	70.	29.940	29.829	82.	58.2	46.8	.206	58.5	110	2.9	..	Cu., W. by N.
	13	21.	760.00	29.817	69.	29.922	29.813	86.3	59.8	48.3	.228	58.5	110	2.7	.2	Cu., Cl., W. by N.
	14	20.8	759.55	29.800	68.5	29.908	29.801	...	61.	48.6	.217	57.	110	2.0	.7	Cu., Cl., W. by N.
	15	20.5	758.80	29.772	68.	29.872	29.766	...	61.4	47.5	.187	55.5	110	2.3	.9	Cu., Cl., W. by N.
	16	20.3	758.60	29.766	67.5	29.862	29.758	...	61.1	48.	.202	56.	100	1.3	1.0	Cl., Cl., W. by N.
	17	19.6	758.50	29.765	67.	29.863	29.761	...	60.5	48.5	.220	57.	90	..	.9	Cl., Cl., W. by N.
	18	19.7	758.50	29.765	66.2	29.861	29.760	...	58.5	47.8	.224	59.8	80	..	1.0	Cl., Cl., W. by N.
	19	19.5	758.50	29.767	66.	29.864	29.763	...	57.	48.3	.258	61.	80	..	1.0	Cl., Cl., W. by N.
	20	18.6	759.00	29.789	65.	29.872	29.774	...	54.	48.3	.287	65.	80	..	1.0	Cl., Cl., W. by N.
	21	18.1	759.20	29.809	64.	29.880	29.785	...	53.	46.5	.257	67.	80	..	.4	Cl., Cl., W. by N.
	22	17.7	759.25	29.803	63.3	29.884	29.790	...	50.4	46.	.276	75.7	79	..	.3	Cl., Cl., W. by N.
23	17.2	759.20	29.803	62.3	29.884	29.793	...	49.1	44.5	.257	75.5	52	..	.4	Cl., Cl., W. by N.	

Observed dew point: 3h., 31°; 9h., 34°; 15h., 35°; 7h., 31h., 35°.

APRIL.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
30	16.7	759.45	29.816	61.4	29.896	29.808	...	43.1	.237	72.	140	...	...	.5	Cl-s.
1	16.2	759.60	29.825	60.7	29.898	29.812	...	46.	.228	73.5	141	...	...	.5	Cl., Cl-s.
2	16.7	759.60	29.827	59.8	29.898	29.813	...	45.	.220	74.3	141	...	...	...	A few Cl. in S.
3	14.8	759.50	29.827	58.1	29.896	29.817	...	42.7	.203	76.	140	...	...	...	Clear.
4	14.4	759.50	29.829	57.3	29.892	29.815	...	40.3	.208	80.	140	...	...	...	Clear.
5	13.7	759.65	29.839	56.1	29.904	29.830	...	39.5	.203	80.	140	...	...	...	Clear.
6	13.5	760.20	29.861	55.4	29.926	29.854	64.	41.9	.210	79.	140	...	...	...	Clear.
7	13.9	760.30	29.860	55.3	29.926	29.854	78.	43.4	.223	80.	140	...	...	...	Cl., Cu.
8	14.5	760.50	29.869	56.4	29.932	29.857	89.5	54.	.239	66.	140	...	...	...	Cl., Cu.
9	15.	760.30	29.858	57.4	29.932	29.855	90.	54.7	.221	65.	235	...	...	.4	Cl.
10	15.4	759.90	29.841	58.4	29.920	29.840	95.	56.	.243	64.3	170	...	...	.3	Cl.
11	16.8	759.45	29.820	59.2	29.900	29.818	96.	58.5	.271	63.3	25	...	...	.7	Cl., Cl-cu., W.
12	16.5	758.65	29.787	60.	29.874	29.789	96.	60.5	.220	58.3	50	...	...	.8	Cl., Cl-cu., W.
13	17.	758.05	29.760	60.8	29.850	29.763	96.3	61.	.203	56.2	120	...	...	.8	Cl., Cl-cu., W.
14	17.6	757.55	29.738	61.7	29.835	29.737	100.4	63.3	.224	56.	115	...	...	.8	Cl., Cl-cu., W.
15	18.	757.15	29.720	62.5	29.810	29.719	...	63.4	.245	58.	50	...	...	.8	Cl., Cl-cu., W.
16	18.1	756.90	29.710	63.	29.800	29.707	...	62.8	.277	61.	30	...	...	.9	Cl., Cl-cu., W.
17	18.1	756.70	29.702	63.5	29.788	29.694	...	61.2	.270	62.	40	...	...	1.0	Cl., Cl-cu., W.
18	18.	756.70	29.702	63.5	29.788	29.694	...	57.5	.312	69.	40	...	...	.4	Cl., Cl-cu., W.
19	18.	756.65	29.700	63.5	29.788	29.694	...	56.5	.299	71.	45	...	...	.3	Cl., Cl-s., W.
20	17.5	756.65	29.702	63.	29.788	29.695	...	53.5	.298	77.	45	...	...	...	Clear.
21	16.8	756.50	29.700	62.3	29.786	29.696	...	51.2	.263	78.	16	...	...	...	Clear.
22	16.2	756.35	29.697	61.	29.780	29.693	...	48.8	.247	80.	18	...	...	...	Clear.
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

• Registered 10.4.

Observed dew point: 3h., 33°; 9h., 33°; 15h., 36°.

Mar.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

[97]

952

Date.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Saunures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
2	0	...	...	...	...	...	...	...	...	...	...	325	...	...	...	...
	1	...	...	...	...	...	...	...	...	...	...	325	...	...	...	...
	2	...	...	...	...	...	...	...	...	...	...	325	...	...	...	...
	3	...	...	...	...	...	...	...	...	...	...	325	...	...	...	...
	4	...	...	...	...	...	...	...	...	...	...	325	...	...	...	...
	5	...	...	...	...	...	...	...	...	...	...	325	...	...	...	...
	6	...	...	...	...	...	...	...	...	...	...	325	...	...	...	...
	7	...	...	...	...	...	...	...	...	...	...	325	...	...	...	...
	8	...	...	...	...	...	...	...	...	...	...	325	...	...	...	...
	9	14.2	751.75	29.527	56.7	29.600	29.526	...	53.	52.	...	325	...	...	...	...
	10	14.3	751.65	29.522	56.8	29.600	29.525	...	53.5	52.9	...	140	...	...	...	...
	11	14.3	751.20	29.504	56.8	29.580	29.505	...	52.9	51.	...	210	...	...	...	...
	12	14.3	751.00	29.496	56.8	29.570	29.495	...	52.4	50.4	...	210	...	...	...	...
	13	14.3	750.30	29.469	57.	29.534	29.459	...	51.6	49.8	...	225	...	...	...	...
	14	14.2	751.00	29.497	56.8	29.568	29.493	...	51.6	49.8	...	190	...	...	...	...
	15	14.	751.30	29.509	56.5	29.584	29.510	...	50.	49.	...	170	...	...	...	...
	16	14.	751.90	29.533	56.4	29.604	29.530	...	50.8	49.3	...	160	...	...	...	...
	17	14.2	752.80	29.569	56.5	29.636	29.562	...	52.	50.	...	170	...	...	...	...
	18	14.3	753.00	29.574	56.7	29.646	29.572	...	52.4	50.	...	170	...	...	...	...
	19	14.	753.35	29.590	56.5	29.667	29.593	...	51.5	49.	...	165	...	...	...	...
	20	14.	754.50	29.636	56.	29.704	29.631	...	50.5	46.5	...	152	...	...	...	...
	21	14.	755.10	29.659	56.	29.728	29.655	...	49.	46.5	...	150	...	...	...	...
	22	14.2	756.00	29.694	56.2	29.746	29.673	...	48.6	44.5	...	160	...	...	...	...
	23	14.2	755.65	29.681	56.1	29.748	29.675	...	46.9	43.3	...	160	...	...	...	...

Observed dew point: 9h., 51°.2; 15h., 48°.2; 21h., 42°.2.

Ci., Cu., N.

N., raining.

N., raining.

N., raining.

N., raining.

N., raining.

N., raining.

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N., raining.

N., raining.

N., raining.

N., raining.

N., raining.

1842.

DAILY METEOROLOGICAL OBSERVATIONS.

Max.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., saturation.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
1881	8	15.7	756.15	29.694	56.7	29.764	29.690	43.4	45.9	42.7	.264	80.2	140	..	..	Clear.
	0	16.7	756.50	29.700	58.4	29.778	29.699	43.7	46.5	42.5	.243	77.7	146	..	..	Very dark.
	2	18.2	756.60	29.698	61.	29.782	29.696	45.2	47.2	43.	.246	71.9	161	..	..	Very dark.
	3	18.3	756.90	29.708	62.6	29.796	29.705	..	47.	42.8	.244	76.	164	..	..	Very dark.
	4	20.1	757.45	29.722	64.	29.818	29.723	..	46.5	43.	.265	79.	157	..	1.0	Cl-a.
	5	21.7	756.75	29.686	66.9	29.804	29.701	..	46.	43.	.260	80.5	178	..	1.0	Cl-a.
	6	22.5	757.65	29.718	68.9	29.810	29.701	..	46.1	43.3	.266	83.5	178	..	.6	Cl-a.
	7	22.2	758.75	29.762	70.	29.864	29.753	..	47.	44.5	.280	82.6	225	..	1.0	Cl-a.
	8	23.	759.10	29.772	70.	29.876	29.765	..	47.5	46.5	.320	86.	225	..	1.0	Cl-a.
	9	21.6	758.95	29.773	69.3	29.864	29.754	..	47.	45.2	.296	89.	233	..	.04	1.0 N., raining.
	10	20.9	758.65	29.765	68.8	29.868	29.759	..	47.	45.5	.303	88.	248	1	.07	1.0 N., raining.
	11	20.6	758.55	29.762	68.	29.860	29.754	..	47.	45.5	.308	90.9	243	..	.06	1.0 N., raining.
	12	20.	758.70	29.771	67.	29.868	29.765	..	47.3	46.3	.316	91.	270	..	.09	1.0 N., raining.
	13	20.1	758.70	29.771	66.8	29.868	29.765	..	47.3	46.1	.314	91.	240	..	.06	1.0 N., raining.
	14	20.	758.20	29.751	66.6	29.842	29.740	..	47.	46.	.315	91.	243	..	.04	1.0 N., raining.
	15	20.3	757.60	29.727	66.7	29.830	29.728	..	47.5	46.2	.313	90.8	240	..	.04	1.0 N., raining.
	16	20.2	757.85	29.737	67.	29.837	29.734	..	47.6	46.4	.317	90.8	230	.2	.02	1.0 N., raining.
	17	20.	757.80	29.736	66.6	29.837	29.735	..	46.5	45.2	.302	90.5	250	.3	..	1.0 N., raining.
	18	19.2	756.60	29.693	66.	29.808	29.707	..	46.5	45.2	.297	90.	210	.2	..	1.0 N., raining.
	19	19.	756.85	29.702	65.	29.818	29.720	..	46.3	44.5	.289	89.2	210	..	..	1.0 N., raining.
	20	17.5	758.35	29.769	63.	29.850	29.757	..	44.8	43.5	.284	92.8	210	..	.03	1.0 N., raining.
	21	17.	758.60	29.782	62.	29.858	29.768	..	44.5	43.5	.288	92.	210	..	.02	1.0 N., raining.
	22	16.5	758.10	29.765	61.	29.834	29.747	..	44.7	43.8	.292	92.	210	..	.04	1.0 N., raining.
	23	16.	757.65	29.749	60.	29.826	29.741	..	44.7	44.	.296	92.3	210	..	.04	1.0 N., raining.

* Recorded 41.5.

Observed dew point: 3h., 43°; 9h., 42°; 15h., 45°; 21h., 44°.

Mar.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

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Day.	Barometer No. 1.		Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygt., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.			Radiation.	Dry.	Wet.		
4	0	16.1	757.75	29.753	59.5	29.826	29.743	.299	92.	140	45.4	44.5	.02	N.
	1	16.8	757.80	29.752	60.	29.826	29.741	.311	92.	140	44.7	44.7	1.0	N., raining.
	2	18.	757.85	29.748	61.2	29.828	29.741	.301	91.2	155	46.	41.9	1.0	N.
	3	....	....	29.757	....	....	29.769	.299	90.3	155	46.2	....	1.0	Clear.
	4	20.7	758.90	29.771	65.1	29.874	29.776	.294	91.	155	46.	44.6	1.0	Clear.
	5	21.	759.30	29.790	67.	29.896	29.793	.292	89.8	155	46.	44.5	1.0	Clear.
	6	21.9	760.15	29.819	68.	29.916	29.810	.301	90.2	173	48.2	45.	1.0	Clear.
	7	23.	760.55	29.835	68.8	29.940	29.831	.294	85.8	180	48.	45.5	1.0	Clear.
	8	23.2	761.10	29.845	70.2	29.954	29.843	.308	85.3	135	49.7	47.1	1.0	N.
	9	24.	761.40	29.857	72.3	29.960	29.843	.314	79.2	135	53.	49.	1.0	Clear.
	10	24.2	761.65	29.867	73.	29.982	29.863	.301	73.2	180	56.1	49.9	1.0	Clear.
	11	25.2	762.00	29.875	74.5	29.976	29.853	.301	69.8	135	58.	50.7	1.0	Clear.
	12	24.7	762.00	29.878	74.8	29.990	29.865	.312	73.	190	56.5	50.5	1.0	Clear.
	13	25.	762.00	29.876	75.	30.000	29.875	.318	70.	165	58.6	51.6	1.0	Clear.
	14	24.3	762.05	29.881	74.5	30.004	29.881	.334	72.	255	57.8	51.9	1.0	Clear.
	15	23.8	762.50	29.901	74.	30.020	29.898	.331	73.5	240	57.	51.5	1.0	Clear.
	16	24.	762.70	29.909	73.6	30.020	29.900	.319	61.5	115	60.6	48.4	1.0	Clear.
	17	24.	762.90	29.917	73.5	30.030	29.910	.277	60.	130	61.	51.2	1.0	Clear.
	18	23.8	763.25	29.934	73.	30.050	29.931	.334	69.	130	60.	58.	1.0	Clear.
	19	24.	763.70	29.948	73.5	30.066	29.946	.334	69.	130	60.	58.	1.0	Clear.
	20	25.	764.80	29.987	74.8	30.100	29.975	.323	74.	135	54.	49.8	1.0	Clear.
	21	26.	765.75	30.020	75.7	30.150	30.024	.287	75.	250	54.5	48.5	1.0	Clear.
	22	26.	766.85	30.060	77.5	30.194	30.063	.311	80.6	245	50.5	47.6	1.0	Clear.
	23	25.9	767.40	30.085	77.5	30.206	30.075	.310	88.7	245	48.2	46.4	1.0	Clear.

* Supplied.

Observed dew point: 9h., 48°; 15h., 44°; 21h., 48°.

May.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Sausures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
5	24.9	768.00	30.113	76.1	30.324	30.097	....	45.7	.274	89.	240	..	..	..	Clear.
1	24.2	767.85	30.111	75.	30.218	30.093	46.3	44.8	.273	86.5	240	..	..	..	Clear.
2	23.7	767.80	30.112	73.6	30.226	30.106	37.	44.9	.259	85.	240	..	..	..	Clear.
3	24.3	768.35	30.126	72.9	30.237	30.118	37.	44.	.243	80.2	240	..	..	..	Clear.
4	22.2	768.60	30.153	72.2	30.250	30.138	36.5	43.	.221	80.	240	..	..	..	Clear.
5	22.5	768.70	30.153	70.6	30.264	30.149	38.2	43.5	.303	86.2	240	..	..	..	Clear.
6	23.2	769.50	30.180	71.4	30.280	30.165	....	45.6	.212	72.5	180	..	..	..	Clear.
7	24.8	770.10	30.197	73.5	30.300	30.180	....	49.5	.220	68.9	160	..	..	..	Clear.
8	24.5	770.25	30.205	74.	30.316	30.194	84.	52.2	.279	65.	160	..	..	..	Clear.
9	23.5	770.40	30.214	73.8	30.330	30.209	93.	55.5	.238	64.	160	..	..	..	Clear.
10	23.	770.40	30.217	73.	30.328	30.209	95.	56.8	.243	62.	150	..	..	..	Clear.
11	20.5	770.00	30.212	70.	30.308	30.197	93.	59.5	.224	56.5	160	..	..	..	Clear.
12	20.6	769.60	30.197	69.3	30.300	30.190	94.	59.4	.200	54.	110	..	..	..	Clear.
13	20.7	769.40	30.189	68.5	30.298	30.181	94.	61.	.241	56.	110	.1	..	..	Clear.
14	21.8	768.90	30.165	69.	30.279	30.161	96.3	61.9	.287	54.5	150	.1	..	..	Clear.
15	22.2	768.55	30.147	69.6	30.242	30.130	90.	63.2	.247	54.7	110	..	..	..	Clear.
16	22.7	768.30	30.135	70.7	30.240	30.127	....	64.4	.246	54.8	100	..	..	..	Clear.
17	22.8	768.70	30.127	71.	30.231	30.119	....	64.9	.253	54.7	100	..	..	..	Clear.
18	22.8	767.90	30.119	71.	30.220	30.105	....	62.8	.277	55.	110	..	..	..	Clear.
19	22.2	768.00	30.125	71.2	30.224	30.109	....	60.5	.288	57.5	110	..	..	..	Clear.
20	22.5	768.00	30.124	76.	30.224	30.112	....	53.5	.275	66.5	110	..	..	..	Clear.
21	21.	767.90	30.127	69.	30.221	30.111	....	51.4	.287	79.	110	..	..	..	Clear.
22	20.	767.75	30.131	68.	30.214	30.114	....	50.	.303	81.8	25	..	..	..	Clear.
23	19.2	767.60	30.121	66.3	30.202	30.100	....	48.5	.298	85.	25	..	..	..	Clear.

Observed dew point: 3h., 35°.5; 9h., 37°.7; 15h., 40°.

Max.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

[97]

956

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
6	0	19.	767.25	30.112	65.	30.198	30.100	...	47.5	45.9	.307	89.	25	...	...	...	Ci-s at Hor.
	1	17.9	767.06	30.110	63.9	30.196	30.101	...	46.5	45.	.298	90.2	25	...	...	...	Ci-s at Hor.
	2	17.	766.65	30.099	62.5	30.176	30.085	...	45.5	44.5	.298	91.	25	...	...	...	Ci s. at Hor.
	3	17.	766.55	30.095	61.6	30.170	30.082	43.5	46.7	45.6	.309	92.	25	...	...	...	Clear.
	4	16.2	766.40	30.093	60.5	30.162	30.076	43.6	45.7	44.8	.302	92.	25	...	...	...	Clear.
	5	14.8	766.40	30.100	59.8	30.160	30.075	43.5	45.3	44.5	.300	92.4	25	...	...	...	Clear.
	6	14.4	766.35	30.099	58.8	30.160	30.078	...	47.3	46.	.309	90.	25	...	...	...	Clear.
	7	13.7	766.30	30.087	58.8	30.158	30.076	...	51.5	48.	.309	82.	45	...	...	...	Clear.
	8	16.3	766.10	30.080	59.5	30.154	30.071	...	56.	51.	.329	76.	70	...	...	...	Clear.
	9	17.	765.80	30.065	60.7	30.140	30.054	90.	60.7	55.	.377	77.8	55	...	...	...	Clear.
	10	17.7	765.25	30.040	62.2	30.118	30.038	92.	63.7	56.7	.391	72.	30	...	...	...	Clear.
	11	18.	764.70	30.017	63.	30.100	30.007	88.5	65.4	56.	.351	67.5	35	...	...	...	Clear.
	12	18.8	763.70	29.972	64.	30.056	29.961	89.	66.7	56.	.336	63.8	60	...	...	...	Clear.
	13	19.4	763.00	29.942	64.7	30.032	29.936	90.8	68.4	56.	.317	63.	35	...	...	...	Clear.
	14	20.	762.50	29.920	65.5	30.008	29.909	89.8	69.	56.4	.320	61.	40	...	...	...	A few Ci.
	15	20.5	762.00	29.897	66.5	29.980	29.878	86.8	69.5	56.8	.325	60.	25	...	...	...	A few Ci.
	16	20.8	761.75	29.887	67.2	29.974	29.871	...	69.9	54.5	.312	59.8	35	...	...	...	A few Ci.
	17	21.2	761.80	29.888	68.	29.974	29.868	...	70.	57.8	.349	59.5	60	...	...	...	A few Ci.
	18	21.7	761.60	29.877	69.	29.969	29.860	...	67.	57.5	.375	63.	60	...	...	...	A few Ci.
	19	21.4	761.50	29.875	69.	29.960	29.851	...	64.	55.	.341	68.5	30	...	...	...	A few Ci.
	20	20.9	761.60	29.881	68.3	29.968	29.861	...	61.	53.	.324	69.5	35	...	...	...	A few Ci.
	21	20.6	762.00	29.897	68.1	29.984	29.878	...	60.	54.	.361	74.5	35	...	...	...	Clear.
	22	20.	761.80	29.893	67.1	29.980	29.877	...	60.5	55.	.380	74.5	45	...	...	...	N., Cu.
	23	20.	762.00	29.900	66.4	29.984	29.882	...	59.5	54.	.366	77.	40	...	...	...	N., Cu.

Observed dew point: 3h., 44° 5; 9h., 50°; 15h., 46°.

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

Mar.]

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Causseure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
7	0	19.6	761.80	29.895	66.	29.978	29.877	...	58.	53.	.357	80.	90	..	..	1.0	Cu., Ci-s.
	1	19.5	761.65	29.890	65.5	29.972	29.873	...	57.6	52.	.343	82.	110	..	..	1.0	N., Ci-s.
	2	19.	762.00	29.905	65.3	29.984	29.885	...	58.2	52.5	.342	72.	135	..	..	1.0	Ci-s.
	3	18.6	762.50	29.927	64.8	30.000	29.902	...	55.5	49.5	.299	66.	170	..	..	1.0	Ci-s.
	4	17.7	763.00	29.950	63.4	30.030	29.936	...	51.4	42.5	.187	64.	170	..	..	.4	Ci-s.
	5	17.4	763.50	29.971	62.8	30.050	29.963	...	52.	40.	.150	64.	175	..	..	.7	Ci-s.
	6	17.	764.50	30.014	61.8	30.084	29.994	...	49.5	41.	.177	65.5	155	..	..	.2	Ci-s.
	7	17.	765.45	30.061	61.4	30.124	30.036	...	51.	42.	.180	67.	165	..	..	.1	Ci-s.
	8	17.	766.00	30.073	61.3	30.156	30.068	...	52.7	44.	.205	66.	190	..	..	.2	Ci., Ci-s.
	9	17.	765.95	30.071	61.3	30.154	30.066	85.	53.4	45.	.216	65.5	190	..	..	.2	Ci., Ci-s.
	10	17.4	766.30	30.082	62.	30.158	30.068	82.5	55.	44.8	.196	63.	170	..	..	.2	Ci., Ci-s.
	11	17.5	766.30	30.082	62.	30.160	30.070	87.5	56.3	46.	.209	62.5	160	..	..	.2	Ci., Ci-s.
	12	17.5	765.80	30.082	61.9	30.150	30.060	86.5	57.4	45.7	.189	60.	190	..	..	.2	Ci., Ci-s.
	13	17.7	765.80	30.081	62.	30.148	30.058	87.	58.5	46.	.184	58.6	165	..	..	.2	Ci., Ci-s.
	14	17.8	764.45	30.047	62.2	30.130	30.040	...	59.5	45.	.163	55.	145	..	..	.6	Ci-s. at Hor.
	15	18.	765.00	30.028	65.2	30.110	30.019	...	61.5	47.6	.188	52.	135	..	..	.6	Ci-s. at Hor.
	16	18.7	765.00	30.025	63.2	30.110	30.017	...	61.4	48.	.199	51.8	170	..	..	.3	Ci., Ci-s.
	17	19.	764.90	30.020	63.8	30.107	30.012	...	61.5	48.9	.219	51.	165	..	..	.5	Ci., Ci-s.
	18	18.2	764.70	30.015	64.	30.100	30.005	...	59.5	50.	.267	56.	170	..	..	.9	Ci., Ci-s.
	19	18.5	764.60	30.010	63.6	30.098	30.004	...	58.	48.5	.249	55.	170	..	..	.9	Ci., Ci-s.
	20	17.8	764.90	30.026	63.	30.110	30.017	...	51.	44.	.226	63.	170	..	..	1.0	Ci., Ci-s.
	21	17.3	765.25	30.040	62.	30.126	30.036	...	48.8	44.	.250	76.	170	..	..	1.0	Ci., Ci-s.
	22	16.9	765.25	30.043	61.2	30.126	30.036	...	46.2	43.	.257	79.	380	..	..	1.0	Ci., Ci-s.
	23	...	...	*30.053	...	...	*30.048	...	*45.3	...	...	*79.5	130	..	..	..	Ci., Ci-s.

Observed dew point: 3h., 44°; 9h., 37°.

* Supplied.

MAR.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1812.]

[97]

856

Date.	Barometer No. 1.			Barometer No. 2.			* Thermometers, Fah.			Hygr., Sausures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
9	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	12.8	756.80	29.731	54.	29.784	29.716	70.4	45.8	43.4	.349	78.	165	...	...	...
8	13.	757.00	29.738	54.2	29.800	29.732	73.2	46.5	41.5	.223	72.2	165	...	...	...
9	13.1	757.20	29.746	54.6	29.808	29.739	73.5	46.8	41.7	.224	72.5	165	...	...	...
10	13.2	757.40	29.753	55.	29.810	29.739	74.3	47.9	41.7	.212	64.2	165	...	...	...
11	15.2	757.95	29.765	56.2	29.832	29.758	71.	47.8	41.	.199	61.9	130	...	...	...
12	18.8	758.70	29.776	61.	29.864	29.777	62.	48.7	40.1	.169	59.	150	...	...	...
13	21.	759.35	29.791	65.3	29.880	29.781	68.2	49.2	41.5	.193	59.1	152	...	...	...
14	21.5	759.15	29.782	67.8	29.878	29.772	72.	49.9	46.7	.282	57.8	140	...	...	...
15	22.	759.00	29.773	69.1	29.872	29.763	71.3	50.7	41.6	.176	57.	140	...	...	...
16	21.3	759.00	29.776	70.	29.872	29.761	...	52.	46.7	.259	64.	150	...	...	...
17	22.8	759.00	29.769	70.3	29.872	29.760	...	52.8	43.8	.177	52.8	120	...	...	...
18	24.	759.20	29.771	72.	29.878	29.761	...	53.5	43.9	.193	51.	125	...	...	...
19	...	...	*29.784	...	...	*29.730	...	*51.6	...	*.201	*56.3	...	...	...	...
20	23.5	760.00	29.805	75.	29.900	29.701	...	46.8	41.	.209	62.	130	...	...	...
21	22.5	760.70	29.838	71.8	29.938	29.821	...	44.5	39.5	.204	65.	125	...	...	...
22	21.9	760.65	29.839	69.9	29.940	29.829	...	43.	40.	.230	78.1	130	...	...	...
23	21.1	760.90	29.853	69.	29.950	29.841	...	43.1	39.5	.219	73.9	130	...	...	...

* Supplied.

Observed dew point: 9h., 35°, 15h., 29°, 21h., 37°.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygt., Fausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
10	0	...	*29.853	...	...	*29.843	...	*41.7	...	*.227	...	...	...	...	A few Ci-s.
1	20.	760.75	29.852	67.1	...	29.843	...	40.4	38.8	.296	130	...	...	...	A few Ci-s.
2	19.4	760.75	29.855	66.	29.950	29.849	...	40.	39.	.244	130	...	...	1.0	N.
3	19.5	760.25	29.835	65.7	29.930	29.831	...	43.	39.	.208	73.	...	...	1.0	N.
4	19.7	760.15	29.830	65.3	29.922	29.823	...	43.2	38.5	.198	77.6	...	...	1.0	N.
5	19.2	760.50	29.846	65.2	29.938	29.840	...	44.	40.	.219	76.	...	...	1.0	N., raining.
6	19.2	760.50	29.846	65.	29.940	29.842	...	45.7	41.4	.230	76.5	...	...	1.0	N., raining.
7	19.4	760.25	29.835	65.9	29.930	29.829	...	47.2	42.	.225	75.	...	...	1.0	N.
8	18.	758.75	29.783	63.7	29.900	29.806	...	48.9	43.2	.231	75.	...	...	1.0	N.
9	18.4	758.80	29.783	63.5	29.872	29.778	...	51.7	46.	.263	74.7	...	...	1.0	Ci-s.
10	19.3	758.30	29.759	64.3	29.856	29.760	...	55.8	49.	.285	72.3	...	...	1.0	Ci-s.
11	20.	757.90	29.740	66.	29.840	29.739	...	60.	51.4	.296	68.	...	...	1.0	Ci-s.
12	20.1	757.20	29.712	66.6	29.812	29.710	...	62.9	53.6	.318	66.	...	...	1.0	Ci-s.
13	20.3	756.90	29.699	67.	29.802	29.699	...	65.5	57.3	.386	70.	...	...	1.0	Ci-s.
14	20.3	756.50	29.683	67.	29.782	29.679	...	66.	57.	.372	68.5	...	...	1.0	Ci-s.
15	20.1	755.80	29.658	67.2	29.756	29.654	...	66.5	57.5	.381	68.	...	...	1.0	Ci-s.
16	20.3	755.65	29.651	67.5	29.750	29.646	...	67.2	57.5	.373	67.	...	...	1.0	Ci-s.
17	20.4	755.35	29.638	67.5	29.728	29.625	...	67.	57.5	.406	68.5	...	...	1.0	Ci-s.
18	20.7	755.55	29.645	67.9	29.742	29.637	...	66.	58.5	.414	70.5	...	...	1.0	Ci-s.
19	20.5	755.50	29.644	67.8	29.740	29.635	...	64.5	58.5	.404	71.	...	...	1.0	Ci-s.
20	20.	755.90	29.661	67.3	29.762	29.658	...	62.5	57.5	.398	72.	...	...	1.0	Ci-s.
21	20.	756.40	29.680	67.	29.769	29.666	...	61.8	56.5	.407	78.	...	...	4	Clear.
22	19.8	756.40	29.682	66.8	29.769	29.667	...	61.5	56.4	.407	80.	...	...	...	Clear.
23	19.8	756.40	29.682	66.5	29.776	29.675	...	60.5	55.2	.400	80.7	...	...	...	Clear.

* Supplied.

Observed dew point: 3h., 32°; 9h., 38°; 5; 15h., 49°.

Max.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

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Date.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
11	0	19.	756.20	29.679	65.5	29.770	29.673	...	58.	53.	.358	83.	35	..	..	..	Clear.
	1	19.	756.00	29.671	65.	29.750	29.654	...	57.5	55.	.414	87.	40	..	.5	..	Ci-s.
	2	18.5	755.75	29.663	64.7	29.748	29.643	...	57.5	54.5	.404	86.5	45	..	..	..	Clear.
	3	18.4	755.65	29.659	64.2	29.740	29.646	...	57.	54.	.394	87.	50	..	..	..	Clear.
	4	18.	755.45	29.654	63.8	29.730	29.636	...	56.2	52.7	.370	87.	50	..	..	1.0	Ci-s., Ci-cu.
	5	17.8	755.40	29.652	63.7	29.728	29.634	...	56.5	53.	.375	87.	50	..	..	.6	Ci-s.
	6	17.8	755.80	29.668	63.	29.750	29.659	...	57.4	53.7	.382	87.	35	..	..	.4	S.
	7	18.	756.00	29.675	63.	29.750	29.659	...	61.4	57.	.425	82.	50	..	..	.2	Ci.
	8	19.	756.00	29.671	64.	29.750	29.656	...	65.	59.7	.460	79.8	35	..	..	.4	Ci-cu., Ci-s.
	9	19.5	755.80	29.661	65.3	29.750	29.653	92.5	67.8	61.	.466	76.	30	1.3	..	.7	Ci., Ci-cu., Cu., Ci-s.
	10	19.6	755.45	29.647	66.	29.736	29.637	...	68.7	60.7	.448	74.	30	1.2	..	.9	Ci., Ci-cu., Cu., Ci-s.
	11	20.2	755.00	29.626	67.	29.720	29.618	95.	71.6	63.6	.502	74.5	30	1.0	..	.2	Ci-s., Ci-cu.
	12	22.5	754.65	29.602	68.3	29.708	29.603	94.	74.	65.	.518	73.	40	1.8	..	.2	Ci-s., Ci-cu.
	13	22.	753.80	29.571	69.7	29.678	29.570	96.2	76.3	66.	.525	70.5	40	2.8	..	.2	Ci-s., Cu.
	14	22.6	753.20	29.544	70.8	29.650	29.538	95.	77.3	66.3	.523	68.7	35	3.0	..	.2	Ci-s., Cu.
	15	23.	752.70	29.523	71.7	29.633	29.520	93.5	78	67.	.538	69.	35	2.8	..	.3	Ci-s., Cu.
	16	23.7	752.50	29.512	73.	29.620	29.503	...	77.6	67.3	.553	70.	40	2.5	..	.5	Ci-s., Cu.
	17	24.5	752.50	29.507	74.	29.620	29.505	...	77.2	68.	.580	71.	35	2.0	..	.2	Ci-s., Cu.
	18	24.6	752.60	29.510	74.8	29.624	29.502	...	74.	66.4	.562	74.2	35	1.8	..	.2	Ci-s., Cu.
	19	24.5	752.80	29.519	74.8	29.632	29.510	...	74.5	66.	.566	76.5	35	1.	..	.2	Ci-s., Cu.
	20	24.1	754.10	29.573	71.5	29.682	29.561	...	71.3	66.8	.541	77.	35	..	..	..	Clear.
	21	24.	755.45	29.626	74.2	29.732	29.612	...	70.5	57.5	.338	63.	160	1.	..	..	Clear.
	22	23.6	756.85	29.681	73.1	29.788	29.669	...	67.	55.5	.323	64.2	150	.8	..	..	Clear.
	23	23.6	757.00	29.687	72.8	29.796	29.677	...	62.	53.8	.335	68.8	190	.1	..	.1	Ci-s. at Hor.

Observed dew point: 3h., 48°; 9h., 57°; 15h., 61°; 21h., 40° 5.

Mar.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.		Dir., degrees.	Force, lbs.			
121														
	0	757.75	29.722	71.9	29.820	29.703	...	59.6	52.2	180	...	...	.05	Clear.
	1	757.65	29.721	70.9	29.816	29.702	...	57.5	50.5	160	...	...	.05	Clear, nearly.
	2	758.05	29.740	69.7	29.830	29.720	...	56.5	49.	120	...	...	.9	N.
	3	758.15	29.745	68.2	29.832	29.726	...	54.4	47.	125	...	...	.4	Cl-a.
	4	758.25	29.753	68.3	29.850	29.744	...	52.5	46.	125	...	...	1.0	S.
	5	758.75	29.775	66.7	29.864	29.763	...	52.5	47.	110	...	...	...	Cl-a.
	6	759.75	29.817	65.	29.900	29.802	...	54.5	47.5	115	...	...	...	Clear.
	7	760.00	29.830	64.5	29.910	29.814	...	55.5	49.	125	...	...	1.0	Clear.
	8	760.50	29.847	64.5	29.928	29.832	...	56.	48.	125	...	...	1.0	Cl-a.
	9	760.50	29.849	64.3	29.932	29.836	...	56.8	49.5	130	...	...	1.0	Cl-a., Cu.
	10	760.50	29.849	64.1	29.940	29.845	...	57.2	49.2	135	...	...	.6	Cl-a., Cu.
	11	760.50	29.849	64.	29.935	29.840	...	57.5	50.	130	...	...	.4	Cl-a., Cu.
	12	760.25	29.839	64.	29.928	29.833	86.5	58.2	50.	180	1.1	...	.4	Cl-a., Cu.
	13	760.25	29.839	64.1	29.930	29.835	85.3	59.5	50.5	136	1.0	...	...	Cl-a., Cu.
	14	760.00	29.827	64.3	29.920	29.824	85.	61.	51.4	...	...	...	...	Hazy.
	15	759.85	29.821	64.8	29.910	29.812	87.3	62.5	52.9	130	.7	...	...	Hazy.
	16	759.90	29.820	65.4	29.913	29.813	...	64.1	54.	110	1.	...	...	Hazy.
	17	759.80	29.814	66	29.910	29.809	...	64.4	54.	140	...	...	...	Hazy.
	18	760.50	29.845	66.	29.922	29.821	...	62.8	55.2	75	...	...	...	Hazy.
	19	760.85	29.859	66.	29.939	29.838	...	61.	53.4	71.7	75	...	...	Hazy.
	20	761.00	29.868	64.7	29.946	29.848	...	56.8	51.8	74.8	...	...	...	Hazy.
	21	760.95	29.867	64.5	29.944	29.848	...	54.	...	78.	...	...	...	Hazy.
	22	761.25	29.878	64.2	29.968	29.873	47.7	62.5	49.	55	...	...	...	Clear.
	23	761.00	29.871	63.8	29.950	29.855	41.	50.	48.	1	...	...	...	Clear.

Observed dew point: 34°, 39°.5, 9h., 43°.2, 15h., 48°.

1842.

DAILY METEOROLOGICAL OBSERVATIONS.

Mar.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Gaumura's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.			Dry.	Wet.			
13	0	17.9	761.15	29.878	63.1	29.960	29.867	40.8	.321	86.2	55	47.3	..	..	Clear.
	1	17.7	761.55	29.884	62.5	29.974	29.883	43.8	.324	89.9	55	47.4	..	..	Clear.
	2	17.	761.15	29.882	61.7	29.950	29.861	42.	.309	89.5	55	46.5	..	..	Clear.
	3	16.5	760.80	29.872	60.8	29.950	29.863	38.	.303	90.5	55	45.	..	..	Clear.
	4	16.2	760.40	29.857	60.2	29.928	29.843	39.	.306	91.	55	45.7	..	.2	Cl-s.
	5	16.3	760.65	29.852	62.	29.936	29.846	..	.315	92.	55	46.	..	.5	S, Cl-s.
	6	..	..	29.852	..	..	29.824	..	*.367	90.7	260	..	..	..	..
	7	20.6	760.15	29.825	65.8	29.886	29.785	..	.420	88.	20	55.	..	..	Clear.
	8	21.4	760.20	29.824	67.7	29.900	29.800	..	.449	82.5	25	58.	..	..	Clear.
	9	22.	759.00	29.773	69.2	29.880	29.771	98.	.413	73.	0	58.6	..	..	Hazy.
	10	23.	758.65	29.755	70.8	29.866	29.752	92.3	.432	70.3	0	60.3	..	.4	Cl-s, Cl-cu.
	11	..	..	29.726	..	..	29.722	..	*.448	71.4	20	62.	..	1.0	Cl-s, Cl-cu, N.
	12	23.3	758.75	29.678	73.	29.794	29.675	..	.469	72.5	20	64.	..	1.0	Cl-s, Cl-cu.
	13	23.7	756.40	29.663	73.2	29.773	29.653	..	.511	74.	20	64.	..	1.0	Cl-s, Cl-cu.
	14	23.7	755.75	29.638	75.5	29.750	29.630	..	.532	76.	20	64.6	..	1.0	Cl-s, Cl-cu.
	15	24.	755.20	29.613	74.	29.730	29.608	..	.544	77.	20	65.1	..	.9	Cl-s, Cl-cu, Cl.
	16	23.9	755.40	29.621	74.	29.738	29.616	..	.537	79.	35	64.5	..	1.0	Cl-s, Cl-cu, Cl.
	17	23.7	755.40	29.625	74.	29.738	29.616	..	.547	84.	50	64.7	..	1.0	Cl-s, N, rain.
	18	23.	755.50	29.632	73.8	29.742	29.620	..	.568	86.	50	64.5	..	1.0	Cl-cu, Cu.
	19	23.	755.80	29.644	73.4	29.753	29.634	..	.562	88.	50	63.8	..	1.0	Cl-cu, Cu.
	20	22.	757.75	29.726	72.	29.826	29.710	..	.390	82.	130	57.	.03	1.0	Cl-cu, Cu.
	21	23.	759.00	29.774	71.2	29.870	29.756	..	.384	72.	130	57.	..	.2	Cl-cu, Cu.
	22	20.7	760.70	29.846	69.5	29.846	29.836	..	.348	69.	135	52.	..	..	Clear.
	23	19.7	761.40	29.879	67.3	29.970	29.866	..	.319	70.	160	44.	..	..	Clear.

Observed dew point: 3h., 45°; 9h., 55°; 2; 15h., 60°.2.

* Supplied.

Max.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
14	0 18.7	761.40	29.884	65.7	29.970	29.871	...	50.3	43.4	219	200	1.6	...	...	Clear.
	1 18.5	761.60	29.892	64.2	29.978	29.882	...	49.	42.5	214	160	1.8	...	...	Clear.
	2 17.6	761.50	29.893	65.	29.970	29.875	...	48.	41.5	205	155	1.5	...	...	Clear.
	3 20.1	762.50	29.920	65.	30.018	29.920	39.7	46.	40.8	214	69	.3	...	...	Clear.
	4 20.5	762.90	29.933	66.	30.034	29.933	39.5	44.8	40.	210	71.		...	...	Cl., Cl-a.
	5 21.7	764.00	29.971	68.	30.068	29.962	...	44.	38.8	195	71.		...	...	Cl., Cl-a.
	6 22.1	761.40	29.984	69.	30.084	29.975	...	45.5	39.	181	69		...	...	Cl., Cl-a.
	7 22.3	765.40	30.023	69.9	30.120	30.009	...	47.5	40.	179	67.		...	...	Clear.
	8 22.	765.80	30.041	70.	30.138	30.027	...	48.3	40.3	176	66.	2.8	...	...	Clear.
	9 21.5	765.90	30.048	69.5	30.150	30.040	82.5	50.4	42.5	199	66.	.5	...	...	Clear.
	10 21.	765.75	30.013	69.	30.142	30.033	85.	51.5	43.	198	65.		...	...	Clear.
	11 20.7	765.50	30.035	68.5	30.136	30.029	89.	53.	44.3	210	64.		...	...	Clear.
	12 19.7	764.90	30.017	68.	30.114	30.008	88.	54.6	45.4	216	64.5		...	...	Clear.
	13 20.2	764.20	29.986	67.2	30.080	29.977	97.	56.8	46.5	216	63.		...	...	Clear.
	14 20.3	763.75	29.968	67.1	30.066	29.963	92.	58.5	48.8	249	62.5		...	...	Cl. in S.
	15 20.7	763.40	29.952	67.	30.057	29.954	94.	60.3	50.3	265	62.		...	...	Cl. in S.
	16 21.1	763.20	29.942	68.	30.042	29.936	...	62.3	51.8	279	61.		...	...	Cl. in S.
	17 21.2	763.15	29.940	68.	30.043	29.936	...	62.9	52.7	395	62.2		...	...	Cl. in S.
	18 21.2	763.35	29.948	68.4	30.049	29.942	...	60.3	52.2	314	65.8		...	...	Cl. in S.
	19 20.8	763.40	29.951	68.2	30.050	29.946	...	57.	50.	295	68.2		...	...	Cl. in S.
	20 20.1	763.45	29.957	68.	30.052	29.946	...	53.	47.5	281	67.		...	...	Cl. in S.
	21 19.6	763.50	29.961	66.3	30.100	30.001	...	51.	47.4	301	81.4		...	...	Cl. in S.
	22 18.8	763.50	29.964	65.	30.100	30.002	...	47.6	45.	285	84.5		...	...	Cl. in S.
	23	.....	*29.794	.....	.....	*30.012	.....	*45.2	.....	*280	*88.		...	...	Cl-a.

* Supplied.

Observed dew point: 3h., 30°; 9h., 33°; 8; 15h., 37°; 4.

Mar.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842:

[97]

964

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saunures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
16	0	12.7	759.75	29.847	54.4	29.910	29.841	36.	41.6	39.5	.236	92.5	214	.	.	Clear.
	1	13.7	759.85	29.847	54.8	29.912	29.841	34.1	41.4	40.5	.259	91.8	213	.	.	Clear.
	2	15.3	760.10	29.849	56.3	29.918	29.843	32.8	39.8	39.4	.254	91.8	213	.	.	Clear.
	3	19.	760.70	29.855	60.	29.942	29.857	33.8	40.	39.2	.248	91.2	210	.	.4	A few Ci-s.
	4	19.5	761.25	29.874	63.4	20.964	29.870	35.3	40.7	39.8	.253	91.	210	.	.1	Ci-s.
	5	19.3	761.65	29.891	64.5	29.976	29.880	....	39.5	39.	.249	91.	210	.	1.0	Ci-s.
	6	20.4	762.70	29.928	65.7	30.019	29.915	....	44.5	43.2	.280	89.	50	.	.3	Ci-s.
	7	20.5	762.95	29.938	66.	30.025	29.924	....	48.	46.	.303	85.3	50	.	.	Clear.
	8	21.	763.35	29.948	68.	30.050	29.944	....	52.7	48.	.295	82.5	50	.	.	Clear.
	9	20.7	763.00	29.936	68.2	30.034	29.928	67.	56.4	53.	.376	84.	30	.5	.	Clear.
	10	20.6	763.00	29.936	68.1	30.034	29.928	69.3	58.4	53.4	.363	79.7	40	.7	.	Clear.
	11	21.	762.65	29.921	68.5	30.024	29.917	75.	60.6	55.1	.382	78.3	40	1.7	.	Clear.
	12	21.3	762.15	29.900	69.4	30.004	29.894	75.5	64.3	57.2	.396	75.	35	1.0	.	Clear.
	13	22.	762.05	29.893	70.3	30.000	29.888	76.5	68.6	58.2	.397	70.7	40	1.2	.	Clear.
	14	22.4	761.60	29.873	71.	29.982	29.869	77.	69	60.3	.431	70.3	40	1.5	.	Clear.
	15	22.4	761.50	29.869	71.	29.976	29.862	76.7	69.5	59.2	.394	68.	45	2.0	.1	Cu, Ci.
	16	22.5	761.50	29.869	71.	29.972	29.858	....	70.6	59.6	.393	66.3	50	1.8	.2	Light Ci.
	17	23.	761.40	29.863	71.7	29.966	29.851	....	70.6	60.3	.413	68.2	40	.8	.1	Light Ci.
	18	23.	761.50	29.867	72.	29.969	29.852	....	69.3	60.5	.433	69.	40	.7	.1	Light Ci.
	19	22.8	762.15	29.893	72.	30.002	29.885	....	65.6	60.5	.475	73.	30	.1	.1	Light Ci., Ci-s.
	20	22.1	762.75	29.921	71.4	30.024	29.909	....	62.1	57.	.416	78.8	29	.	.1	Light Ci., NW. Hor.
	21	22.	763.55	29.952	71.2	30.058	29.944	58.8	60.5	55.5	.394	78.5	30	.	.1	Ci-s., NW. Hor.
	22	21.2	764.05	29.976	71.	30.068	29.954	55.4	59.3	54.8	.378	80.9	33	.	.	Clear.
	23	20.9	764.50	29.995	69.2	30.088	29.979	55.	58.2	51.5	.393	82.8	36	.	.	Clear.

Observed dew point: 3h., 38.5°; 9h., 48°; 15h., 50°; 21h., 51°.

Mar.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Dir., degrees.	Force, lbs.			
17	0	20.5	764.60	30.000	68.1	30.088	29.972	53.2	58.5	53.	36			1.0	Ci-s.
	1	20.	764.45	29.997	67.3	30.084	29.980	53.	55.9	53.3	35			.8	Clear.
	2	19.2	764.45	30.001	66.2	30.088	29.987	52.3	54.5	52.6	35			1.0	Clear.
	3	19.	764.40	30.000	65.5	30.086	29.987	...	54.	52.7	35			.5	Clear.
	4	18.8	765.10	30.027	64.8	30.120	30.025	...	52.	50.5	35			1.0	Ci-s.
	5	19.8	765.75	30.050	65.	30.134	30.036	...	51.3	50.5	35			1.0	Ci-s.
	6	23.3	767.00	30.081	69.3	30.176	30.067	...	56.7	55.	35				Ci-s.
	7	24.2	767.15	30.083	71.3	30.190	30.075	...	59.5	57.	35				Ci-s.
	8	24.5	767.25	30.086	74.	30.200	30.078	...	62.8	59.5	35				Ci-s.
	9	24.7	767.25	30.081	74.5	30.200	30.077	80.1	65.7	61.9	35				Clear.
	10	25.8	767.25	30.079	76.1	30.206	30.079	82.	68.2	62.7	18				Clear.
	11	26.1	767.25	30.078	77.2	30.206	30.076	84.	71.4	65.	11				Clear.
	12	26.1	767.00	30.068	78.	30.188	30.055	87.3	75.5	67.5	5			.7	Light Ci., Cu.
	13	26.5	766.75	30.058	78.2	30.182	30.049	88.8	76.6	66.6	5	2		.7	Light Cu.
	14	26.5	766.50	30.048	78.3	30.172	30.038	87.	76.7	64.4	20	2.0		.6	Light Cu.
	15	26.3	766.45	30.046	78.2	30.170	30.037	84.	76.6	63.8	15	2.0		.4	Light Cu.
	16	26.3	766.50	30.048	78.	30.175	30.042	83.	75.7	63.7	0	2.0		.2	Light Cu.
	17	26.3	766.70	30.056	78.	30.182	30.049	...	73.2	61.8	0	1.7		.2	Light Cu.
	18	25.9	767.00	30.069	77.3	30.186	30.055	...	67.5	53.7	0	1.2		.2	Light Cu.
	19	25.3	767.10	30.076	77.	30.190	30.060	...	65.8	57.7	0	.5		.4	Light Cu.
	20	24.1	767.30	30.089	75.	30.202	30.077	...	61.5	56.5	0	.5		.3	Light Cu.
	21	23.5	767.60	30.104	74.	30.214	30.092	...	60.8	55.4	...	...		.3	Light Cu.
	22	22.8	767.50	30.104	78.	30.208	30.089	58.2	58.5	54.2	355	...		...	Clear.
	23	22.5	767.40	30.101	72.	30.210	30.093	53.3	57.	53.6	356	...		...	Clear.

Observed dew point: 3h., 51°; 9h., 57° 2.

Mar.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

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966

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hyg., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
18	0 21.7	767.70	30.117	70.9	30.214	30.100	49.5	55.	52.4	375	356	..	..	.2	Cl-s. and S. at Hor.
1	21.1	767.70	30.120	69.8	30.212	30.101	47.1	53.	50.7	356	356	..	..	..	Clear.
2	20.5	767.50	30.114	68.5	30.208	30.101	41.	52.	50.	350	356	..	..	.5	Clear.
3	20.2	767.55	30.118	67.5	30.210	30.106	45.	51.	49.	338	356	..	..	..	S.
4	19.	767.80	30.134	66.8	30.218	30.115	..	50.8	49.	341	356	..	..	1.0	Cl-s.
5	18.8	768.00	30.142	65.3	30.226	30.127	..	51.	49.	338	356	..	..	1.0	Cl-s.
6	18.7	768.15	30.150	64.8	30.235	30.138	..	51.	49.5	350	356	..	..	1.0	Cl-s.
7	19.	768.50	30.161	64.3	30.236	30.159	..	54.5	52.	372	330	..	..	.8	Cl-s. and S. at Hor.
8	19.2	768.50	30.160	65.	30.256	30.157	..	60.5	57.	434	330	..	..	.7	Cl-s. and S. at Hor.
9	19.6	768.20	30.146	65.5	30.256	30.140	78.	66.	61.1	488	330	..	..	.8	Cl-s. and S. at Hor.
10	20.3	768.05	30.137	67.	30.210	30.132	82.	69.8	63.4	514	330	..	..	.8	Cl-s. and S. at Hor.
11	20.6	767.85	30.128	67.5	30.236	30.119	84.	69.	62.7	501	330	..	..	.9	Cl-s. and S. at Hor.
12	21.2	767.50	30.111	68.4	30.224	30.104	81.5	69.8	63.1	505	330	..	..	.9	Cl-s. and S. at Hor.
13	21.5	766.85	30.085	69.1	30.212	30.078	82.7	71.5	62.7	473	330	..	..	.9	Cl-s. and S. at Hor.
14	22.	766.50	30.068	70.	30.187	30.067	84.5	71.7	62.1	453	330	..	..	.9	Cl-s. and S. at Hor.
15	22.3	766.35	30.061	70.8	30.178	30.050	..	71.	61.8	437	330	..	..	1.0	Cl-s. and S. at Hor.
16	22.7	766.20	30.053	71.2	30.164	30.045	..	70.	62.	469	330	..	..	1.0	Cl-s. and S. at Hor.
17	22.8	766.00	30.045	71.7	30.160	30.034	..	70.	62.	469	330	..	..	.8	Cl-s. and S. at Hor.
18	22.8	766.90	30.011	72.	30.150	30.029	..	67.3	61.2	476	330	..	..	.6	Cl-s. and S. at Hor.
19	22.2	766.15	30.053	71.8	30.146	30.037	..	65.5	59.5	448	330	..	..	.7	Cl-s. and S. at Hor.
20	22.1	766.20	30.056	71.	30.156	30.044	..	63.5	58.8	450	330	..	..	.4	Cl-s. and S. at Hor.
21	22.	766.30	30.061	70.8	30.158	30.046	..	62.	57.3	425	330	..	..	..	A few Cl-s.
22	21.7	766.30	30.062	70.3	30.160	30.050	..	60.	57.3	447	330	..	..	.4	A few Cl-s.
23	21.3	766.25	30.062	69.9	30.156	30.045	..	59.4	56.9	444	330	..	..	.2	A few Cl-s.

Observed dew point: 21h., 55°.7.

Mar.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
19	0 21.	766.00	30.053	69.	30.138	30.029	53.	57.4	55.4	.425	89.	6	..	..	.2	Cl.s. at N.
	1 20.6	765.50	30.035	68.4	30.128	30.021	52.5	56.5	54.7	.418	91.	8	..	..	.2	Cl.s. at N. and E.
	2 20.3	765.25	30.037	67.7	30.120	30.016	48.9	55.6	54.7	.428	92.6	8	..	..	.3	Cl.s. at N. and E.
	3 20.	764.85	30.013	68.	30.100	29.994	..	55.	54.4	.427	93.	10	..	..	.4	Cl.s. at N. and E.
	4 19.7	765.10	30.024	66.6	30.108	30.006	..	55.5	54.7	.429	93.	10	..	..	.7	Cl.s. at N. and E.
	5 19.5	765.00	30.020	66.2	30.106	30.005	..	56.3	55.5	.441	93.	10	..	..	.9	Cl.s. at N. and E.
	6 19.4	765.20	30.030	65.8	30.116	30.017	..	59.5	57.7	.465	89.8	10	..	..	.6	Cl.s. at N. and E.
	7 19.7	765.10	30.024	66.	30.110	30.009	..	62.7	59.4	.475	86.	30	..	..	.2	S. at Hor.
	8 20.5	765.15	30.021	67.	30.110	30.007	..	66.	61.5	.499	83.5	30	..	..	..	Clear.
	9 20.9	764.75	30.005	68.3	30.108	30.001	78.5	68.8	62.6	.501	79.	40	.7	..	..	Clear.
	10 21.1	764.80	30.006	69.	30.108	29.999	80.	69.8	63.6	.520	78.7	45	1.2	..	..	Clear.
	11 21.6	764.60	29.995	69.6	30.102	29.992	82.	71.4	64.4	.536	77.	45	1.2	..	.1	Cl., Cu. in Hor.
	12 23.	764.50	29.985	70.7	30.090	29.978	83.7	73.4	65.4	.535	75.	75	1.5	..	.8	Cl., Cu., Cl.s.
	13 23.	763.55	29.947	71.8	30.068	29.941	85.5	75.5	66.5	.547	73.	45	2.1	..	.4	Cl., Cu., Cl.s.
	14 23.6	763.00	29.922	72.6	30.028	29.910	85.7	76.3	66.6	.542	71.3	50	2.1	..	.3	Cl., Cu.
	15 24.2	762.80	29.912	73.5	30.018	29.898	80.9	76.	66.3	.535	70.2	60	2.3	..	.8	Cl., Cu.
	16 24.5	762.50	29.899	74.2	30.016	29.894	..	75.	66.3	.547	72.2	55	1.5	..	.9	Cl., Cu.
	17 24.7	762.50	29.898	74.8	30.016	29.893	..	78.8	68.	.582	72.5	45	.7	..	.7	Cu., N., thunder.
	18 24.4	763.30	29.930	75.	30.034	29.909	..	73.5	67.3	.597	76.	55	..	..	1.0	Cu., N., thunder.
	19 24.3	763.90	29.954	76.	30.064	29.935	..	82.	65.	.595	92.	180	.5	..	1.0	Cu., N.
	20 21.	764.80	29.991	74.5	30.100	29.977	..	65.6	63.8	.674	92.	200	..	..	.01	Cu., N.
	21 24.	765.20	30.006	74.	30.118	29.996	..	64.4	61.5	.518	89.	225	.2	..	1.0	N., raining.
	22 23.3	765.65	30.028	73.7	30.134	30.014	..	59.5	56.6	.489	93.8	208	.2	..	1.0	N., raining.
	23 22.8	765.45	30.023	72.9	30.128	30.009	..	58.4	56.9	.455	92.	209	.3	..	1.0	N., raining.

Observed dew point: 9h., 60°; 15h., 57° 5'; 21h., 56° 1.

Mar.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Day.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hygr., Gaussure's.	Wind.		Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Wet.		Dir., degrees.	Force, lbs.		
20	0 22.5	765.80	30.038	71.7	30.138	30.023	...	58.	430	245	.6	1.0	N., raining.
	1 20.8	766.00	30.054	70.	30.132	30.021	...	54.6	391	245	2.7	1.0	N., raining.
	2 19.7	766.00	30.060	67.7	30.134	30.030	...	52.	356	245	2.3	1.0	N., raining.
	3 18.7	765.80	30.057	66.2	30.128	30.027	...	50.8	345	245	2.0	1.0	N., raining.
	4 17.8	765.60	30.053	64.6	30.130	30.034	...	49.5	336	230	4.0	1.0	N., raining.
	5 17.	766.00	30.073	62.9	30.150	30.057	...	48.	320	242	2.8	1.0	N., raining.
	6 16.1	766.40	30.093	61.3	30.168	30.080	...	46.1	305	240	2.8	1.0	N., raining.
	7 15.2	767.20	30.128	59.8	30.188	30.104	...	45.4	301	240	2.7	1.0	N., raining.
	8 14.5	767.20	30.132	58.1	30.196	30.117	...	44.8	299	240	3.0	1.0	N., raining.
	9 13.7	767.10	30.132	57.	30.192	30.116	...	44.3	283	250	3.1	1.0	N., raining.
	10 13.	767.20	30.139	55.8	30.204	30.131	...	44.	282	250	7.3	1.0	N., raining.
	11 12.4	767.65	30.160	54.5	30.220	30.151	...	43.6	276	250	4.2	1.0	N., raining.
	12 12.3	768.10	30.179	53.7	30.234	30.167	...	43.3	275	225	3.8	1.0	N., raining.
	13 12.	768.30	30.188	53.	30.244	30.178	...	42.2	265	215	2.6	1.0	N., raining.
	14 11.4	768.50	30.199	52.2	30.256	30.192	...	42.5	261	220	3.7	1.0	N., raining.
	15 11.3	768.55	30.201	52.	30.256	30.193	...	43.	272	220	2.0	1.0	N., raining.
	16 11.1	768.40	30.196	51.7	30.250	30.189	...	43.6	261	240	1.8	1.0	N., raining.
	17 11.3	768.40	30.194	51.4	30.250	30.189	...	43.5	266	240	3.9	1.0	N.
	18 11.4	768.75	30.203	51.	30.264	30.203	...	43.5	266	210	1.0	1.0	N.
	19 11.7	768.80	30.208	51.5	30.267	30.205	...	43.3	258	253	1.2	1.0	N.
	20 12.3	769.30	30.224	51.6	30.276	30.214	...	43.5	252	230	.8	1.0	N.
	21 16.	769.90	30.232	55.6	30.300	30.227	...	44.2	269	216	.2	1.0	N.
	22 17.7	769.85	30.218	59.1	30.304	30.221	...	44.5	263	210	.1	1.0	N., Ci-s.
	23 19.3	770.15	30.224	62.3	30.308	30.217	...	44.6	268	235	.3	1.0	N., Ci-s.

Observed dew point: 3h., 46°.5; 9h., 42°.3; 15h., 46°.7; 21h., 38°.2.

Max.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gauss's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Force of vapor, ins.	Dir., degrees.	Force, lbs.		
21	0	20.2	770.15	30.218	65.	30.310	30.210	...	44.6	42.7	.269	218	8	1.0	N, Ci.s.
	1	20.8	769.95	30.209	65.8	30.300	30.198	...	44.7	43.	.273	212	...	1.0	N, Ci.s.
	2	20.2	769.75	30.203	65.2	30.294	30.194	...	44.9	42.8	.267	232	...	1.0	N, Ci.s.
	3	20.2	769.65	30.199	66.5	30.288	30.185	...	44.7	42.6	.265	205	...	1.0	N, Ci.s.
	4	20.6	769.65	30.198	67.	30.284	30.179	...	44.3	42.3	.263	198	...	1.0	N, Ci.s.
	5	20.4	769.95	30.211	67.	30.300	30.195	...	44.	41.7	.254	200	...	1.0	N, Ci.s.
	6	20.3	770.15	30.218	66.8	30.326	30.221	...	44.	41.8	.256	200	...	1.0	N, Cu.
	7	21.4	770.40	30.223	...	...	*30.220	...	45.2	43.8	.288	250	...	1.0	Cu.
	8	22.8	770.75	30.230	69.5	30.352	30.221	...	47.2	45.4	.299	250	...	.8	Cu.
	9	22.	770.60	30.228	71.	30.332	30.216	...	49.	45.2	.274	250	...	.9	Ci, Cu.
	10	23.	770.40	30.215	71.3	30.326	30.209	...	50.6	48.5	.284	250	...	1.0	Ci, Cu.
	11	23.	770.40	30.215	72.	30.326	30.207	...	53.2	48.5	.301	265	...	1.0	Ci, Cu.
	12	22.8	770.00	30.200	71.8	30.308	30.189	...	54.7	49.6	.310	240	...	1.0	Ci, Cu.
	13	22.7	769.30	30.173	71.5	30.284	30.167	...	57.6	51.7	.329	270	...	1.0	Ci, Cu.
	14	22.5	768.50	30.143	71.2	30.250	30.134	...	59.8	52.3	.319	240	...	.9	Ci, Cu.
	15	22.2	768.00	30.125	72.	30.233	30.114	...	60.	50.5	.272	260	...	.9	Ci-cu.
	16	22.2	767.70	30.113	70.7	30.222	30.107	...	60.7	51.5	.288	275	...	.8	Ci-cu.
	17	21.1	767.10	30.089	70.4	30.192	30.078	...	59.3	51.	.291	260	...	.4	Cu, Ci, Ci-cu.
	18	21.5	766.75	30.082	70.	30.180	30.069	...	58.2	49.7	.273	262	...	.1	Ci-cu.
	19	21.2	766.60	30.077	69.5	30.178	30.068	...	57.5	50.	.288	260	...	.1	Ci-cu.
	20	20.2	766.40	30.073	68.	30.168	30.062	...	53.8	49.5	.318	260	...	.1	Ci-cu.
	21	20.	766.80	30.090	67.	30.174	30.071	...	51.	48.4	.324	280	...	.1	Ci-cu.
	22	19.	766.40	30.078	65.5	30.160	30.061	...	49.5	47.6	.323	280	...	.2	Ci-cu.
	23	...	...	*30.068	...	...	*30.061	...	*49.	...	*.320	...	...	...	...

*Supplied.

• Observed dew point: 3h., 42°; 9h., 43°; 4; 15h., 42°.

Max.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1849.]

[97]

970

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature.	Obs'd height, millimetres.	Corr. height, inches.	Temperature.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
28	0 16.4	756.90	29.718	60.7	29.784	29.698	...	58.9	58.4	.490	38	...	.05	1.0	N., raining.
1	1 17.3	756.70	29.705	61.6	29.784	29.696	...	58.7	58.2	.487	98	...	.06	1.0	N., raining.
2	2 20.	756.65	29.690	64.	29.782	29.687	...	58.9	58.2	.485	98	...	...	.9	N., Cu.
3	3 21.8	756.50	29.676	67.6	29.776	29.672	...	57.5	57.	.467	198	...	...	.6	Cu., Ci-cu.
4	4 22.8	756.90	29.787	69.7	29.793	29.691	...	57.2	56.7	.463	98	...	...	.5	Ci-cu.
5	5 24.2	757.30	29.808	71.8	29.808	29.691	...	59.	58.2	.454	132	...	...	.6	Cu., Ci-cu.
6	6 25.5	758.20	29.725	74.3	29.836	29.714	69.8	61.9	59.2	.479	127	...	...	.3	Ci-cu.
7	7 27.2	758.65	29.734	77.	29.862	29.732	75.3	63.9	59.3	.460	81.	...	...	.2	S, Ci-s, Ci-cu.
8	8 26.8	759.00	29.750	78.2	29.872	29.739	76.8	65.3	59.3	.444	138	...	...	.3	Cu., Ci-s.
9	9 26.	759.10	29.757	78.	29.877	29.744	76.	66.3	58.6	.414	135	...	...	.4	Cu.
10	10 28.	759.30	29.765	77.7	29.888	29.761	74.	67.1	58.2	.395	70.	...	...	.3	Cu.
11	11 24.3	759.30	29.774	76.	29.888	29.761	74.	67.7	59.6	.427	110	...	...	.8	Cu.
12	12 24.3	759.60	29.785	75.	29.900	29.775	78.	67.3	58.6	.403	125	...	...	.7	Cu.
13	13 23.7	759.55	29.787	74.2	29.900	29.778	79.	66.2	58.8	.399	135	...	...	.8	Cu.
14	14 23.9	759.75	29.793	74.	29.904	29.782	76.5	67.7	58.4	.393	145	...	...	.8	Cu.
15	15 23.8	759.70	29.791	73.8	29.904	29.782	77.	69.1	59.7	.414	135	...	...	.7	Cu.
16	16 23.9	760.05	29.805	73.8	29.918	29.796	77.3	69.5	60.	.418	140	...	...	.8	Cu.
17	17 23.9	760.25	29.813	73.5	29.928	29.807	77.3	69.5	60.	.424	145	...	...	.7	Cu.
18	18 23.6	761.25	29.854	73.5	29.979	29.858	...	65.	58.	.411	180	...	...	.3	Cu.
19	19 23.3	761.95	29.883	73.3	29.997	29.876	...	63.9	57.3	.404	180	...	...	.1	Cu.
20	20 22.7	762.55	29.909	72.2	30.013	29.896	...	60.	55.5	.400	185	...	...	.3	Ci-s at Hor.
21	21 22.2	762.75	29.919	71.3	30.018	29.903	...	59.	54.8	.392	180	...	...	.3	Ci.
22	22 20.	762.85	29.934	67.8	30.034	29.918	...	55.2	52.8	.384	185	...	...	.3	Ci., Ci-s.
23	23 20.6	763.15	29.942	68.4	30.034	29.927	...	54.4	52.2	.377	185	...	...	.3	Ci.

Observed dew point: 3h., 55°.6; 9h., 53°; 15h., 52°.8; 21h., 48°.2.

Mar.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1942.

Day.	Barometer No. 1.		Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gauges.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
24	0 20.	763.25	29.949	67.7	30.034	29.930	...	54.4	.360	85.5	185	...	...	.4	Cl, Ci-s.
	1 19.8	763.05	29.943	66.8	30.030	29.927	...	54.	.365	86.5	185	...	...	.3	Cl, Ci-s.
	2 19.5	763.00	29.942	66.1	30.022	29.921	...	53.5	.365	90.	258	...	...	.4	Cl, Ci-s.
	3 18.8	762.80	29.937	65.1	30.022	29.924	...	52.5	.380	93.	260	...	...	.7	Cl, Ci-s.
	4 17.8	762.70	29.939	64.4	30.020	29.924	...	53.5	.416	93.	262	...	...	1.0	S., foggy.
	5 18.	763.05	29.951	63.8	30.036	29.941	...	55.3	.436	93.	286	...	...	1.0	S., slight fog.
	6 21.	763.70	29.962	65.8	30.064	29.963	...	55.3	.424	91.8	295	...	...	1.0	S., Ci-s.
	7 25.5	764.10	29.956	71.1	30.072	29.958	...	58.2	.430	89.	295	...	...	.7	Cl, Ci-s., Ci-cu.
	8 26.7	764.30	29.958	76.	30.082	29.955	...	62.1	.437	81.	295	...	...	.5	Cl-s.
	9 26.2	764.00	29.949	77.7	30.072	29.939	78.8?	67.1	.491	78.	298	...	...	.7	Cl, Ci-cu.
	10 26.	763.80	29.942	77.6	30.056	29.924	81.	68.	.515	78.	324	...	...	1.0	Cl, Ci-cu., Cu.
	11 26.7	763.50	29.927	78.	30.040	29.907	80.7	70.4	.524	76.4	314	.2	...	1.0	Cl, Ci-cu., Cu.
	12 26.	762.55	29.893	78.	30.018	29.885	79.5	70.	.600	76.	310	.1	...	1.0	Cu., Ci-cu., Ci-s.
	13 25.6	762.45	29.891	77.4	30.011	29.880	...	67.5	.473	76.	290	.6	...	1.0	Cu., Ci-s., N.
	14 25.	761.40	29.853	76.6	29.970	29.842	...	66.2	.468	79.	300	.8	...	1.0	Cu., Ci-s., N.
	15 24.5	761.10	29.844	76.	29.960	29.833	...	64.3	.447	74.3	300	1.0	...	1.0	Ci-cu., N., showery.
	16 23.7	760.75	29.834	75.	29.944	29.819	...	58.3	.449	83.5	295	.9	...	1.0	Ci-cu., N., showery.
	17 23.	760.50	29.828	73.3	29.936	29.816	...	59.9	.454	89.	300	.2	...	1.0	N., raining.
	18 22.2	760.75	29.841	72.3	29.944	29.826	...	58.5	.456	89.5	315	.1	...	1.0	N., raining.
	19 22.	760.40	29.829	71.8	29.930	29.813	...	58.	.448	89.8	300	...	...	1.0	N., raining.
	20 21.3	760.10	29.820	70.	29.926	29.815	...	56.8	.448	94.5	300	...	...	1.0	N., raining.
	21 21.	760.15	29.823	69.3	29.930	29.820	...	57.5	.456	93.	285	...	...	1.0	N., raining.
	22 20.6	760.00	29.819	68.5	29.922	29.815	...	56.5	.498	94.8	285	...	...	1.0	N., raining.
	23 20.3	759.90	29.817	67.9	29.916	29.810	...	56.	.441	94.8	238	...	...	1.0	N., raining.

Observed dew point: 3h, 48° 3; 9h, 59°; 15h, 55° 8.

Mar.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
25 0	20.7	759.60	29.803	67.2	29.890	29.787	...	55.3	55.3	.439	93.5	235	...	...	1.0	N.
1 1	20.5	759.00	29.779	66.8	29.870	29.767	...	55.5	54.7	.429	93.5	225	...	...	1.0	N.
2 2	23.5	759.30	29.777	69.3	29.880	29.770	...	55.5	54.7	.429	93.5	220	...	...	1.0	N.
3 3	24.8	759.60	29.780	73.4	29.884	29.764	...	55.5	54.6	.427	93.5	195	...	...	1.0	N.
4 4	24.3	759.80	29.785	73.8	29.890	29.768	...	55.3	54.5	.426	93.2	195	...	...	1.0	N.
5 5	23.7	759.75	29.795	73.5	29.900	29.780	...	55.5	54.4	.417	93.1	160	...	...	1.0	N.
6 6	24.	760.50	29.822	73.	29.928	29.808	...	56.2	55.2	.431	91.3	160	...	...	.6	Cu.
7 7	24.3	761.25	29.830	73.8	29.962	29.840	...	57.5	56.	.441	80.5	165	...	...	.4	Ci-cu.
8 8	24.	761.75	29.871	73.8	29.976	29.854	...	58.3	56.3	.439	76.	170	...	...	.6	Ci-cu.
9 9	23.3	761.85	29.879	73.	29.984	29.865	73.	59.6	52.5	.327	71.	190	...	...	.6	Ci.
10 10	23.2	761.90	29.881	72.8	29.988	29.869	73.	60.5	53.	.330	69.7	200	...	...	.7	Ci.
11 11	23.3	761.65	29.871	72.7	29.978	29.860	74.	62.4	53.4	.318	67.	140	...	...	.6	Ci., Cu.
12 12	23.1	761.70	29.874	72.7	29.978	29.860	74.	63.2	54.5	.338	65.	140	...	...	.6	Ci., Cu.
13 13	23.5	761.50	29.865	72.8	29.966	29.848	76.8	64.8	55.6	.348	66.2	125	...	...	.6	Ci., Cu.
14 14	24.	761.00	29.842	73.2	29.946	29.827	76.7	66.8	57.	.363	63.	125	...	...	.4	Ci., Cu.
15 15	24.2	760.70	29.830	73.5	29.934	29.814	76.2	67.4	56.	.338	62.	120	...	...	.2	Ci., Cu.
16 16	24.7	760.20	29.808	74.1	29.924	29.802	75.7	68.5	56.7	.337	60.	125	...	...	.4	Ci.
17 17	24.5	760.80	29.813	74.3	29.926	29.803	...	68.	56.4	.334	59.	130	...	...	.1	Slight Ci.
18 18	23.6	760.30	29.817	73.8	29.926	29.804	...	67.5	58.5	.397	64.	90	...	...	.2	Ci., Cu.
19 19	22.	760.40	29.829	72.7	29.920	29.812	...	65.	58.	.411	66.8	90	...	...	.1	Ci.-a.
20 20	22.	760.45	29.831	70.	29.932	29.821	...	60.5	56.	.408	70.1	85	...	...	...	Clear.
21 21	22.	761.00	29.852	70.	29.950	29.839	48.	57.3	52.2	.345	76.2	65	...	...	...	Clear.
22 22	23.6	761.80	29.876	70.9	29.980	29.866	51.	57.	54.1	.396	84.5	75	...	...	...	Clear.
23 23	25.2	762.35	29.887	73.6	29.996	29.876	50.	56.	53.6	.395	81.2	76	...	...	...	Clear.

Observed dew point: 3h., 53°. 5; 9h., 47°. 8; 21h., 47°. 4.

MAY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
26	0 26.2	762.70	29.899	75.7	30.014	29.888	47.	55.4	.387	84.9	75	..	..	..	Clear.
1	1 27.1	762.85	29.899	78.	30.020	29.887	...	54.4	.375	87.7	75	..	..	.4	Clear.
2	2 27.1	762.60	29.889	78.6	30.008	29.874	...	53.5	.363	88.5	72	..	..	.8	Cu., Ci-cu.
3	3 26.4	762.55	29.892	78.5	30.010	29.876	...	51.3	.338	88.5	70	..	..	.5	Ci.
4	4 25.	762.50	29.896	76.8	30.010	29.882	...	49.5	.344	90.	70	..	..	.9	Ci.
5	5 24.5	762.75	29.908	76.	30.016	29.889	...	49.5	.344	91.	70	..	..	1.0	Ci-s.
6	6 22.7	763.00	29.926	72.	30.028	29.909	...	53.4	.385	89.	70	..	..	1.5	Ci-s.
7	7 25.3	763.50	29.934	74.2	30.038	29.916	...	58.3	.390	78.6	70	..	..	.4	Ci-s.
8	8 23.5	763.50	29.942	75.8	30.044	29.917	...	63.3	.375	75.	70	..	..	.5	Ci-s., Ci.
9	9 25.2	763.85	29.948	75.7	30.068	29.912	81.3	66.	.444	73.5	30	..	..	.2	Ci-cu., Ci.
10	10 25.7	764.05	29.954	76.7	30.072	29.944	81.5	68.	.448	72.3	30	..	..	.8	Ci-cu., Ci.
11	11 25.0	763.95	29.949	77.	30.070	29.910	84.	69.7	.435	69.	33	..	..	.7	Ci-cu., Ci.
12	12 26.	763.75	29.940	77.4	30.058	29.927	85.5	71.8	.425	66.	0	..	..	.9	Ci-cu., Ci.
13	13 26.	763.30	29.922	77.7	30.040	29.908	86.	72.1	.387	61.5	140	..	..	1.0	Ci-cu., Ci., Cu.
14	14 26.1	763.00	29.910	77.8	30.030	29.893	82.5	72.	.400	63.	90	..	..	1.0	Ci-cu., Ci., Cu.
15	15 26.3	762.70	29.898	78.	30.030	29.897	85.	72.2	.427	62.	65	..	..	1.0	Ci-cu., Cu.
16	16 26.	762.40	29.897	78.	30.018	29.885	...	70.5	.437	66.	25	..	..	1.0	Ci-cu., Cu.
17	17 26.	762.10	29.875	77.5	30.000	29.869	...	71.1	.457	65.3	25	..	..	1.0	Ci-cu., Cu.
18	18 25.7	762.10	29.877	77.2	30.000	29.870	...	69.	.463	70.	27	..	..	1.0	Ci-cu., Cu.
19	19 24.2	762.10	29.884	76.2	30.000	29.873	...	68.	.492	73.2	28	..	..	1.0	Ci-cu., Cu.
20	20 24.7	762.35	29.892	75.3	29.998	29.862	...	65.	.467	79.	360	..	..	1.0	Ci-cu., Cu.
21	21 24.1	762.40	29.894	75.	30.010	29.885	...	63.5	.454	81.2	355	..	..	1.0	Ci-cu., Cu.
22	22 23.8	762.40	29.897	74.2	30.006	29.884	...	63.	.452	81.3	351	..	..	1.0	Ci-cu., N., Cu.
23	23 23.2	763.50	29.904	73.3	30.016	29.896	...	60.6	.449	83.8	22	..	..	1.0	N., raining.

Observed dew point: 3h., 48° 5; 9h., 56° 3; 15h., 51°; 21h., 56° 3.

Mar.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1942.

[97]

974

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hygr. Gauges.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.		Dir., degrees.	Force, lbs.			
27	0	22.4	762.30	29.900	72.6	29.994	29.876	...	58.1	434	10	...	.05	1.0	N., raining.
	1	22.	762.10	29.895	71.3	29.990	29.875	...	57.	435	11	...	.18	1.0	N., raining.
	2	21.6	761.70	29.881	70.7	29.972	29.860	...	57.	447	348	...	.15	1.0	N., raining.
	3	21.5	760.80	29.848	69.8	29.990	29.879	...	56.5	439	335	...	.15	1.0	N., raining.
	4	21.	760.35	29.831	69.	29.926	29.817	...	56.5	439	310	...	.03	1.0	N., raining.
	5	20.3	760.00	29.821	68.5	29.918	29.811	...	57.	447	300	...	...	1.0	N., raining.
	6	20.	759.85	29.816	67.5	29.912	29.808	...	58.5	461	300	...	...	1.0	N., raining.
	7	20.7	760.00	29.822	67.2	29.918	29.815	...	58.7	465	305	...	...	1.0	N., drizzling.
	8	20.2	760.10	29.826	67.	29.918	29.815	...	59.3	489	305	...	...	1.0	N., drizzling.
	9	20.	759.90	29.818	67.	29.912	29.809	...	60.	495	305	...	...	1.0	N., drizzling.
	10	20.	752.60	29.806	66.9	29.904	29.801	...	61.5	521	300	...	.05	1.0	N., S., rain.
	11	20.	759.00	29.782	66.8	29.870	29.767	...	64.6	570	303	...	.62	1.0	N., S., rain.
	12	20.	758.65	29.769	67.	29.860	29.757	...	65.	566	...	...	...	1.0	N., S.
	13	20.2	758.00	29.742	67.2	29.840	29.737	...	85.	541	40	2	...	1.0	N., S.
	14	20.5	758.20	29.749	67.7	29.842	29.738	...	67.6	565	60	2	...	.6	N., Cu.
	15	21.1	757.90	29.735	68.5	20.834	29.727	...	71.5	623	39	2	...	.7	Ci-cu., scud.
	16	21.9	757.75	29.725	69.4	29.822	29.712	...	72.5	615	55	3	...	.9	Ci., Cu., Ci cu.
	17	22.2	757.75	29.733	70.2	29.822	29.711	...	73.	649	45	...	...	.9	Cu., Ci cu., N.
	18	22.8	758.00	29.730	71.1	29.830	29.716	...	71.5	626	64	...	...	1.0	Cu., Ci cu.
	19	22.9	758.20	29.738	71.6	29.848	29.733	...	70.5	614	66	...	...	1.0	Cu., N.
	20	22.8	758.60	29.750	71.7	29.853	29.738	...	66.5	565	75	...	...	...	Cu., N.
	21	22.6	759.00	29.769	71.7	29.866	29.751	...	64.5	562	75	...	...	...	Hazy.
	22	22.2	759.40	29.787	71.4	29.880	29.765	...	64.	555	75	...	...	...	Clear.
	23	22.	759.65	29.789	71.	29.892	29.778	...	62.6	529	74	...	...	...	Clear.

Observed dew point: 9h., 58° 2; 15h., 64° 6; 21h., 62° 5.

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

Mar.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
28	0 21.8	759.75	29.804	70.7	29.890	29.778	....	61.2	60.1	.413	92.1	74	..	..	..	Clear.
	1 21.6	759.80	29.806	70.	29.896	29.787	57.8	62.6	61.	.523	90.	126	..	..	..	Clear.
	2 21.3	759.70	29.804	69.5	29.896	29.786	56.2	61.	59.2	.489	90.8	126	..	..	..	Clear.
	3 21.3	759.85	29.810	69.	29.906	29.797	....	59.6	58.	.471	90.	135	..	..	.8	Cl.-cu., N.
	4 21.7	760.35	29.828	68.5	29.924	29.817	....	58.5	57.2	.461	90.	135	..	..	.8	Cl.-cu., Cl.-s.
	5 21.2	761.15	29.862	68.3	29.954	29.847	....	58.	56.5	.449	90.5	135	..	..	.3	Cu., Cl.-cu.
	6 20.	761.40	29.877	68.5	29.974	29.867	....	60.7	58.	.458	86.	135	..	..	.2	Clear.
	7 22.	761.85	29.886	69.8	29.982	29.871	....	60.5	60.	.483	80.5	135	..	..	..	Clear.
	8 22.7	762.30	29.899	71.	29.990	29.876	....	65.	60.	.466	77.	135	..	..	..	Clear.
	9 23.4	762.30	29.896	72.6	30.006	29.888	78.5	66.8	59.3	.427	72.5	145	..	..	..	Small Cu.
	10 24.	762.25	29.891	73.3	30.000	29.980	81.	67.7	60.2	.443	72.	140	..	..	..	Cu.
	11 24.3	762.00	29.880	74.	29.934	29.823	84.	69.	59.5	.409	68.	130	..	..	.1	Cu.
	12 23.3	761.75	29.875	74.	29.980	29.856	80.3	69.7	60.4	.426	67.	150	..	..	.2	Cu.
	13 23.8	761.40	29.858	73.8	29.964	29.842	83.8	71.6	61.1	.425	66.	130	..	..	.3	Cu.
	14 24.7	761.25	29.849	74.5	29.962	29.839	86.2	72.5	62.5	.456	66.3	100	..	..	.3	Cu.
	15 25.1	761.05	29.839	75.1	29.952	29.827	88.8	74.5	63.5	.465	64.5	60	..	..	.3	Cu.
	16 25.2	760.80	29.830	76.	29.940	29.813	87.5	74.7	63.7	.468	64.5	70	..	..	.2	Cu.
	17 25.7	760.80	29.827	76.7	29.940	29.812	....	74.2	65.	.514	65.	80	..	..	..	Cu.
	18 26.	760.80	29.825	76.8	29.940	29.811	....	73.2	64.3	.503	68.	60	..	..	..	Hazy at Hor.
	19 26.	760.80	29.825	77.	29.940	29.810	....	71.4	64.3	.523	72.	60	..	..	..	Cl.-s. at Hor.
	20 25.7	760.80	29.830	76.5	29.940	29.812	....	65.2	61.4	.505	79.	60	..	..	..	Cl.-s. at Hor.
	21 24.3	761.50	29.860	75.5	29.960	29.834	....	63.1	60.1	.491	86.8	36	..	..	..	Clear.
	22 23.8	761.40	29.856	74.6	29.958	29.835	....	61.3	58.9	.477	88.	36	..	..	..	Clear.
	23	.....	*29.856	....	.....	*29.836	....	*60.5	....	*.460	*90.	..	..	..	..	..

* Supplied.

Observed dew point: 3h., 58° 2; 9h., 52° 5.

Mar.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1812.]

[97]

976

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., saturation.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
30	0	22.7	752.55	29.516	72.	29.616	...	65.	64.2	.592	246	...	...	1.0	N., rain.
	1	22.5	752.35	29.509	71.9	29.612	...	64.6	64.	.590	240	...	...	1.0	N., Cu.
	2	22.3	752.10	29.500	71.3	29.600	...	64.4	63.7	.583	240	...	...	1.0	N.
	3	22.2	750.25	29.429	71.	26.570	...	63.4	62.6	.561	240	...	...	1.0	N.
	4	22.	750.05	29.423	70.8	29.566	...	63.3	62.7	.565	240	...	...	1.0	N.
	5	21.9	750.70	29.419	70.6	29.558	...	63.4	63.	.574	240	...	...	1.0	N.
	6	21.7	751.00	29.461	70.3	29.560	...	63.5	62.	.573	240	...	.02	1.0	N., raining hard.
	7	21.5	751.00	29.463	69.8	29.564	...	64.3	63.	.564	240	...	.01	1.0	N., raining.
	8	22.4	751.30	29.469	70.7	29.570	...	65.	62.5	.572	240	...	...	1.0	N., raining.
	9	23.9	751.10	29.452	72.	29.564	...	69.3	67.5	.650	130	...	...	1.0	N., Ci-cu.
	10	24.2	751.60	29.473	74.	29.580	...	70.	67.	.626	150	...	...	.9	Cu., Ci-cu., N.
	11	25.	751.80	29.457	75.	29.570	...	69.9	66.3	.604	150	...	.07	.9	Cu., Ci-cu., N., rain.
	12	25.7	750.60	29.428	76.2	29.540	...	74.3	69.5	.662	150	...	...	.7	Cu., Ci., Cu-s., N.
	13	25.4	751.00	29.444	76.5	29.570	...	72.5	64.1	.583	25	.7	.27	.6	Cu., Ci., Cu-s., N.
	14	25.7	750.75	29.431	76.5	29.550	...	74.4	63.7	.648	30	...	...	.9	Cu., Cu-s. N.
	15	25.5	751.00	29.444	76.5	29.558	...	73.6	60.6	.391	120	1.5	...	.5	Cu., Cu-s.
	16	25.9	751.60	29.466	76.5	29.582	...	73.6	60.6	.391	120	2.0	...	.8	Cu., Ci., Cu-s.
	17	25.9	752.05	29.481	76.7	29.606	...	73.	62.5	.452	158	1.7	...	.1	Cu.
	18	25.1	753.00	29.524	76.1	29.638	...	70.5	62.9	.482	175	...	...	.2	Cu.
	19	24.	753.10	29.530	75.7	29.641	...	66.5	60.	.451	190	...	...	.2	Cu.
	20	24.3	751.00	29.565	74.7	29.680	...	64.6	59.4	.455	190	...	...	1.0	Cu., N.
	21	24.1	755.00	29.605	74.3	29.710	...	60.9	55.9	.401	210	...	...	1.0	Cu., N.
	22	23.7	755.55	29.630	73.8	29.728	...	59.7	55.	.369	208	...	...	.9	Cu., Ci-s.
	23	23.2	755.80	29.641	73.	29.748	...	57.7	53.4	.371	208	...	...	.3	Ci-s.

Observed dew point: 3h., 60°.5; 9h., 67°; 15h., 55°.

Max.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapour, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
31	0 22.7	756.00	29.651	72.1	29.750	29.633	...	55.3	.303	84.	208	...	...	.8	Cu., Ci cu., Ci-a.
	1 21.9	756.20	29.663	70.9	29.762	29.649	...	55.4	.363	84.	208	...	...	1.0	Cu., Ci cu., Ci-a.
	2 21.3	756.50	29.678	69.7	29.780	29.670	...	55.1	.340	80.9	208	...	...	.8	Cu., Ci cu., Ci-a.
	3 20.9	756.45	29.678	68.8	29.774	29.665	...	53.7	.335	81.	208	...	...	.3	Cu., Ci cu., Ci-a.
	4 20.2	756.75	29.693	68.	29.780	29.676	...	51.6	.309	82.	170	...	...	.2	Ci-a.
	5 19.3	756.90	29.704	66.6	29.800	29.698	...	50.2	.314	86.	170	...	...	...	Clear.
	6 20.	757.85	29.739	65.9	29.812	29.711	...	53.	.316	82.5	143	...	...	...	Clear.
	7 19.7	758.25	29.755	66.	29.840	29.739	...	55.	.305	74.8	155	...	...	.8	Cu., Ci., Cu.
	8 19.7	758.85	29.779	66.	29.870	29.769	...	57.	.295	78.	120	...	...	.9	Ci cu., Ci-a.
	9 19.8	759.15	29.790	66.	29.871	29.770	...	59.1	.320	73.1	140	...	...	.1	Cu.
	10 19.7	759.00	29.784	66.	29.864	29.768	...	59.8	.302	69.2	160	...	...	.3	Cu.
	11 19.9	759.05	29.784	66.1	29.880	29.779	...	62.	.275	66.	135	...	...	.8	Cu.
	12 20.	758.90	29.779	66.2	29.872	29.771	...	62.5	.284	63.3	140	...	...	.3	Cu.
	13 20.1	758.65	29.769	66.5	29.864	28.762	74.5	64.1	.302	63.5	100	...	...	.4	Cu.
	14 20.2	758.65	29.768	67.	29.862	29.759	77.	64.2	.258	60.5	160	...	...	.4	Cu.
	15 20.9	758.50	29.759	67.2	29.860	29.757	74.	65.6	.264	60.	145	...	...	.3	Cu.
	16 21.2	758.70	29.766	68.	29.860	29.754	74.7	67.	.298	59.	150	...	...	.2	Cu.
	17 22.	759.10	29.777	69.	29.880	29.771	...	67.5	.297	57.9	142	...	...	.1	Cu. ?
	18 22.	759.55	29.795	69.7	29.890	29.788	...	67.2	.328	58.8	140	...	...	...	Clear.
	19 22.	759.80	29.805	69.5	29.903	29.793	...	65.4	.434	65.4	140	...	...	...	Clear.
	20 21.4	760.40	29.832	69.4	29.924	29.814	...	59.5	.341	71.	140	...	...	...	Clear.
	21 20.9	761.10	29.861	68.7	20.954	29.847	47.	54.9	.350	79.5	140	...	...	...	Clear.
	22 20.	761.75	29.891	67.2	29.972	29.869	45.1	53.6	.343	84.2	139	...	...	...	Clear.
	23 19.7	761.65	29.889	66.8	29.972	29.869	44.1	51.7	.338	86.2	139	...	...	...	Clear.

Observed dew point: 3h., 49°; 9h., 47°; 15h., 39°.

JUNY.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

978

Day.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
1	0	18.8	762.00	29.905	65.	29.976	43.2	50.5	48.	.321	86.	140	..	..	..	Clear.
2	1	18.3	762.50	29.928	64.	29.978	42.3	50.3	48.5	.355	85.4	140	..	..	..	Clear.
3	2	17.9	761.80	29.904	63.2	29.980	41.5	50.	48.5	.338	86.	168	..	..	..	Clear.
4	3	17.8	762.00	29.911	63.7	29.988	42.	49.6	48.5	.331	86.	160	..	..	..	Clear.
5	4	17.	762.30	29.927	61.5	30.000	42.2	47.2	45.7	.305	86.3	150	..	..	..	Cl-s, S.
6	5	17.	763.05	29.956	61.	30.065	42.5	52.6	51.	.374	80.	160	..	..	..	Cl-s, S.
7	6	17.	764.10	29.998	60.8	30.070	..	58.5	56.5	.443	75.	165	..	.5	..	Cl.
8	7	17.	764.35	30.008	60.2	30.085	..	59.3	54.5	.381	73.5	165	..	.4	..	Cl.
9	8	17.5	764.50	30.011	61.7	30.100	..	60.7	53.	.328	70.	165	..	.3	..	Cl.
10	9	18.2	764.70	30.015	63.	30.100	76.	62.5	54.	.328	71.5	115	.2	..	..	Cl-cu, W.
11	10	19.	764.85	30.018	64.	30.106	78.	64.5	56.2	.341	68.5	240	..	..	..	Cl, Cl-cu, W.
12	11	19.	764.85	30.018	64.8	30.106	80.8	66.	55.1	.322	65.3	230	..	..	..	Cl, Cl-cu, (1) NW, (2) W.
13	12	19.5	764.75	30.012	65.2	30.102	81.	66.5	55.	.313	63.2	170	.1	..	..	Cl, Cl-cu, (1) NW, (2) W.
14	13	20.	764.50	29.999	66.	30.088	80.5	67.	55.1	.311	62.	125	.1	..	..	Cl, Cl-cu, (1) NW, (2) W.
15	14	20.5	764.20	29.984	67.	30.076	84.3	69.2	56.	.310	60.	180	..	..	..	Cl, Cl-cu, (1) NW, (2) W.
16	15	21.2	764.00	29.974	68.	30.070	82.	68.3	57.3	.343	61.	180	..	.2	..	Cl, Cl-cu, NW.
17	16	21.7	761.10	29.975	68.8	30.078	83.	69.6	56.5	.318	59.3	225	..	.3	..	Cl, Cl-cu, WNW.
18	17	22.5	764.10	29.971	70.	30.078	..	70.7	60.7	.432	63.	285	..	..	..	Cl. at Hor.
19	18	22.9	764.50	29.986	71.	30.094	..	68.	59.	.403	66.2	385	..	..	..	Clear.
20	19	22.8	764.50	29.986	71.	30.094	..	66.3	57.4	.379	68.	341	..	..	..	Clear.
21	20	21.7	765.00	30.010	70.2	30.118	..	59.	53.	.346	76.	340	..	..	..	Clear.
22	21	21.3	765.50	30.032	69.5	30.126	..	57.	52.5	.356	77.2	342	..	..	..	Clear.
23	22	21.1	765.70	30.041	69.	30.134	..	55.2	51.	.329	77.3	4	..	..	..	Clear.
	23	20.4	765.85	30.051	67.9	30.140	49.	63.6	49.1	.317	82.4	.6	..	..	..	Clear.

Observed dew point: 3h., 45° 5; 9h., 49°; 15h., 44° 6; 21h., 45° 7.

Date.	Barometer No. 1.				Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Dir., degrees.			Force, lbs.				
2	0	19.8	766.10	30.064	66.9	30.146	30.043	42.9	51.4	49.	.334	84.4	6				Clear.
	1	19.2	766.20	30.070	65.9	30.150	30.049	42.3	50.5	48.5	.332	84.4	6				Clear.
	2	18.6	766.00	30.065	64.9	30.144	30.046	41.8	49.5	48.1	.334	90.4	6				Clear.
	3	18.2	766.00	30.066	63.8	30.144	30.049	41.6	48.	46.	.303	90.5	6				Clear.
	4	17.5	766.25	30.080	62.7	30.158	30.067	41.	48.	46.3	.310	89.	6				Clear.
	5	18.3	766.30	30.078	62.5	30.160	30.069	...	48.	46.	.308	89.	6				Clear.
	6	17.2	766.75	30.101	61.7	30.184	30.096	...	51.6	49.2	.336	86.	180				Clear.
	7	17.5	767.60	30.133	61.7	30.212	30.124	...	57.	52.	.343	81.8	240				Clear.
	8	18.	768.00	30.147	62.8	30.230	30.137	...	61.3	54.5	.368	76.	230				Clear.
	9	18.7	768.20	30.152	64.	30.234	30.139	77.5	63.7	56.5	.384	73.3	250				Clear.
	10	19.2	768.10	30.145	65.	30.234	30.136	80.	66.1	57.	.371	68.	200				Clear.
	11	19.7	767.80	30.131	66.	30.225	30.124	82.	68.	56.5	.336	64.3	275				Cu.
	12	20.3	767.50	30.116	66.8	30.210	30.107	83.	69.	57.	.338	62.	230				A few small Cu.
	13	20.7	767.30	30.106	67.5	30.200	30.096	84.3	69.8	57.5	.343	59.	200				A few small Cu.
	14	21.2	767.00	30.092	68.2	30.187	30.091	85.5	70.6	58.6	.364	59.	205				A few small Cu.
	15	22.	766.80	30.081	69.	30.184	30.075	85.	70.9	56.3	.296	58.2	220				A few small Cu.
	16	22.9	766.35	30.059	70.	30.160	30.049	85.5	71.3	56.4	.294	56.	235	1			A few small Cu.
	17	23.	766.35	30.058	71.	30.160	30.046	...	71.	57.4	.335	57.4	280	1			Cu., Ci-cu.
	18	22.7	766.50	30.065	71.	30.166	30.052	...	67.5	56.4	.338	61.	280	2			A few small Cu.
	19	22.3	766.50	30.067	71.	30.166	30.053	...	66.	56.	.344	63.	300	3			A few small Cu.
	20	21.7	766.75	30.080	69.7	30.178	30.068	...	60.2	53.2	.336	68.	300	2			A few Ci-a.
	21	21.	767.00	30.092	69.	30.182	30.073	...	57.	52.5	.366	79.	300	4			A few Ci-s.
	22	20.5	767.15	30.100	68.2	30.186	30.080	...	54.7	51.2	.349	83.3	4	2			Ci-s.
23	20.	766.90	30.094	67.2	30.182	30.079	48.1	52.6	49.8	.339	85.5	6				Clear.	

Observed dew point: 3h., 44° 5; 9h., 51° 6; 15h., 49°; 21h., 49° 6.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gauges's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.					
C	0	19.6	766.60	30.084	66.1	30.168	30.087	...	51.4	48.8	309	...	...	...	A few Ci-s. in NW.
	1	19.	766.25	30.073	65.	30.150	30.052	...	49.2	48.	309	...	...	...	A few Ci-s. in NW.
	2	18.1	765.75	30.058	64.	30.138	30.043	41.1	48.6	47.	313	...	...	...	Clear.
	3	17.9	765.80	30.061	63.	30.138	30.045	39.2	47.	45.9	315	...	...	...	Clear.
	4	17.6	765.55	30.052	62.	30.132	30.042	...	45.6	44.6	284	...	...	...	A few Ci. in E.
	5	16.6	765.70	30.062	61.	30.136	30.048	40.	45.3	45.3	284	...	...	...	Clear.
	6	16.7	765.95	30.072	60.4	30.142	30.056	...	51.5	49.5	284	...	...	...	A few Ci-s.
	7	17.	766.20	30.081	60.8	30.156	30.069	...	57.	54.	256	...	...	...	A few Ci s.
	8	17.7	766.00	30.069	62.	30.144	30.054	...	60.5	56.1	290	...	...	...	Clear.
	9	18.4	765.50	30.046	64.	30.132	30.037	74.	63.5	55.9	340	...	...	...	Ci.
	10	19.	765.00	30.023	65.	30.112	30.014	82.	65.5	56.	330	...	...	...	Light Ci.
	11	19.7	765.00	30.020	65.3	30.110	30.011	83.5	67.	58.2	340	...	...	...	Light Ci.
	12	20.3	764.80	30.016	66.2	30.105	30.004	88.7	68.3	58.3	366	...	...	...	Light Ci.
	13	20.5	764.20	29.984	67.	30.077	29.974	88.	69.5	59.	340	...	...	...	Clear.
	14	20.8	763.80	29.967	67.6	30.064	29.960	90.5	70.6	60.4	345	...	...	...	Clear.
	15	21.4	763.25	29.943	68.2	30.042	29.936	89.	71.4	61.2	325	...	...	...	Clear.
	16	22.	763.00	29.930	69.1	30.032	29.923	89.8	72.	61.2	325	...	...	...	Cu., SSW.
	17	22.1	763.00	29.929	70.	30.026	29.916	87.5	69.5	60.	300	...	...	...	Cu., SSW.
	18	22.2	763.00	29.928	70.5	30.026	29.914	...	67.8	60.	340	...	...	...	Cu.
	19	21.8	763.10	29.935	70.7	30.032	29.920	...	63.7	57.	295	...	...	...	Ci-s.
	20	21.	763.25	29.944	69.3	30.034	29.924	...	59.	54.5	305	...	...	...	Ci s.
	21	21.	763.60	29.958	68.7	30.046	29.939	...	58.	54.4	300	...	...	...	Ci-s.
	22	20.8	763.50	29.945	68.3	30.046	29.939	...	57.6	54.8	302	...	...	...	Ci-s., Ci-cu.
	23	20.2	763.20	29.946	67.8	30.034	29.928	...	55.8	53.6	259	...	...	...	Ci-s. in NE.

Observed dew point: 9h., 49° 2; 16h., 53° 8; 31h., 51° 8.

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
4	0	20.	762.70	29.928	67.	30.016	29.913	52.	55.2	384	90.	259	..	..	..	Clear.
	1	19.3	761.85	29.898	66.	29.988	29.887	...	54.5	389	92.	238	..	..	.3	Cl-s, S.
	2	19.1	761.65	29.891	65.7	29.974	29.875	...	54.9	418	92.	262	..	..	.8	S.?
	3	19.2	761.15	29.871	65.	29.960	29.862	...	55.4	425	91.9	285	..	..	1.0	Cu.
	4	19.	761.00	29.865	64.6	29.950	29.854	...	55.5	436	92.	280	..	..	1.0	Ci-s. and S.
	5	18.8	761.85	29.900	64.4	29.994	29.898	...	56.4	440	92.	270	..	..	1.0	Ci-s. and S.
	6	18.5	762.00	29.907	64.1	29.998	29.903	...	56.5	452	92.	270	..	..	1.0	Ci-s. and S.
	7	18.5	761.20	29.876	64.1	29.980	29.885	...	58.5	470	92.	260	..	..	1.0	Ci-s. and S.
	8	18.8	761.05	29.868	64.1	29.960	29.865	...	59.5	484	91.	270	..	..	1.0	Ci-s. and S.
	9	18.8	760.80	29.859	64.3	29.946	29.850	...	62.1	514	89.7	270	..	..	1.0	Ci-s. and S.
	10	18.8	760.50	29.847	64.5	29.930	29.834	...	65.	517	86.	325	..	..	1.0	Ci-s.
	11	19.2	760.75	29.856	65.	29.940	29.842	...	69.1	543	81.	340	..	..	1.0	Ci-s, Ci cu.
	12	19.8	760.70	29.852	65.8	29.940	29.840	...	70.	555	80.5	335	1	..	1.0	Ci-s, Ci cu.
	13	20.2	760.10	29.825	66.5	29.922	29.820	...	72.5	527	75.	0	..	..	1.0	Cu, Ci-s, Ci-cu.
	14	20.7	760.10	29.823	67.4	29.920	29.816	...	72.3	548	75.3	20	5	..	1.0	Ci-cu, Ci-s, Cu, SSW.
	15	21.1	759.90	29.813	68.3	29.910	29.803	...	69.5	535	80.	15	..	..	1.0	Ci-cu, Ci-s, N., SSW.
	16	21.2	759.65	29.803	69.	29.884	29.775	...	69.2	570	80.9	35	..	..	1.0	Ci-cu, Ci-s, N., SSW. by S.
	17	21.2	759.60	29.801	69.3	29.900	29.790	...	69.	563	82.	30	1	..	1.0	Cu, N., SW by S.
	18	21.3	759.65	29.802	69.5	29.904	29.794	...	68.1	563	86.	63	..	..	1.0	Cu, Ci-cu, N., SW by S.
	19	21.3	760.00	29.816	69.7	29.910	29.800	...	67.5	573	86.3	65	..	..	1.0	Cu, Ci-cu, N., SW by S.
	20	21.3	760.50	29.836	69.7	29.922	29.812	...	67.	579	88.2	65	..	..	1.0	Cu, Ci-cu, N.
	21	21.4	760.65	29.842	69.7	29.926	29.816	...	66.	581	89.2	55	..	..	1.0	Cu, Ci-cu, N.
	22	21.6	760.65	29.841	69.7	29.928	29.818	...	65.5	565	89.2	20	..	..	1.0	Cu, Ci-cu, N.
	23	...	.....	*29.840	...	.....	*29.818	...	*65.	*550	*89.2	20	..	..	..	Cu, Ci-cu, N.

* Supplied.

Observed dew point: 3h., 53°; 9h., 59° 2.

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

[97]

982

Day.	Hour.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hygr, Saussure's.	Wind.		Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.		Dir., degrees.	Force, lbs.		
6	0	23.7	756.95	29.685	71.2	29.810	29.695	...	65.5	65.4	35	...	...	...
	1	23.5	756.15	29.655	70.8	29.800	29.686	...	66.5	66.4	140	...	...	...
	2	23.4	757.40	29.704	70.3	29.804	29.692	...	66.6	66.1	209	...	...	...
	3	...	...	*29.723	...	...	*29.706	...	*64.6	...	...	...	...	...
	4	...	...	*29.736	...	...	*29.719	...	*62.9	...	...	...	...	...
	5	22.5	758.30	29.743	71.7	29.850	29.735	...	62.7	59.	*88.1	...	...	...
	6	22.	759.10	29.777	71.	29.876	29.762	...	62.8	58.8	165	...	...	...
	7	21.2	759.75	29.807	70.	29.900	29.789	...	63.3	58.5	160	...	...	...
	8	21.5	760.35	29.830	69.8	29.924	29.813	...	65.4	58.	160	...	...	...
	9	21.8	760.10	29.820	69.6	29.920	29.810	...	67.2	58.2	166	...	...	...
	10	22.	760.10	29.817	70.	29.916	29.805	...	68.7	60.1	166	...	...	...
	11	22.7	760.10	29.813	70.8	29.916	29.803	...	68.6	60.	150	...	...	...
	12	23.	760.35	29.822	71.4	29.930	29.815	...	69.2	60.2	170	...	...	...
	13	23.1	760.70	29.836	72.	29.936	29.819	...	68.9	58.6	160	...	...	...
	14	23.5	760.70	29.838	72.5	29.936	29.818	...	70.5	60.2	160	...	...	...
	15	23.7	760.95	29.843	73.	29.948	29.829	...	71.	60.5	125	...	...	...
	16	24.1	760.70	29.830	73.3	29.938	29.818	...	71.7	60.2	145	...	...	...
	17	24.2	761.00	29.841	73.9	29.956	29.834	...	69.3	59.	165	...	...	...
	18	24.2	761.90	29.877	74.	29.990	29.868	...	67.4	57.4	170	...	...	...
	19	24.2	762.35	29.894	73.9	30.016	29.894	...	64.8	56.5	176	...	...	...
	20	23.1	763.10	29.929	73.	30.040	29.921	...	60.5	53.	190	...	...	...
	21	22.9	764.00	29.966	72.	30.070	29.953	...	58.5	50.5	190	...	...	...
	22	21.9	764.25	29.989	70.8	30.034	29.920	...	56.	49.7	196	...	...	...
	23	21.1	764.75	30.004	69.3	30.100	29.990	47.	54.	46.5	181	...	...	...

* Supplied.

Observed dew point: 9h., 51° 2; 15h., 53° 5; 21h., 38°.

JUNE.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1942.]

Day.	Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
1	7	20.1	764.00	29.979	67.8	30.112	30.008	45.9	51.9	45.4	.245	66.3	189	.3	..	..	Clear.
2	1	19.3	765.60	30.041	66.5	30.130	30.028	49.8	49.8	44.2	.242	68.2	168	.4	..	..	..
3	2	18.7	765.20	30.033	65.	30.114	30.016	41.2	47.6	44.1	.265	70.	170	.1	..	..	Clear.
4	3	18.1	767.10	30.111	63.4	30.188	30.094	45.5	45.5	..	..	72.	180	..	..	..	Clear.
5	4	17.7	767.75	30.138	62.3	30.220	30.129	37.	44.7	..	..	73.	190	..	..	..	Clear.
6	5	16.6	768.55	30.175	61.4	30.250	30.162	..	44.	..	..	75.	190	..	..	..	A few Ci. in SW.
7	6	16.5	769.25	30.204	60.3	30.260	30.174	..	47.9	..	..	73.	210	..	..	..	A few Ci. in SW.
8	7	16.8	769.95	30.230	60.3	30.300	30.214	..	51.	..	..	68.9	250	.5	..	..	A few Ci. in SW.
9	8	17.2	770.25	30.238	60.9	30.320	30.233	..	52.3	..	..	65.	280	1.2	..	..	A few Ci. in SW.
10	9	17.3	770.35	30.244	61.2	30.328	30.241	..	55.5	..	..	64.	240	1.5	..	..	A few Ci. in SW.
11	10	17.2	770.30	30.239	61.2	30.324	30.236	..	56.	..	..	64.9	240	.8	..	..	A few Ci. in SW.
12	11	17.5	770.00	30.226	61.8	30.320	30.230	80.5	57.	..	..	62.	232	.8	..	..	A few Ci. in SW.
13	12	17.7	770.00	30.225	62.	30.304	30.213	82.	58.6	48.8	.246	61.3	255	.3	..	..	Ci., W.
14	13	18.	770.25	30.234	63.5	30.320	30.228	83.	59.6	49.2	.244	61.	235	.1	..	..	Ci., W.
15	14	18.4	770.10	30.225	63.	30.310	30.216	84.	61.1	50.6	.261	61.	230	.4	..	..	Ci., W.
16	15	19.	770.50	30.239	64.	30.328	30.231	85.	62.5	51.2	.260	60.	275	..	..	..	Ci., W.
17	16	19.4	770.75	30.246	64.5	30.336	30.238	86.5	64.4	53.7	.301	59.3	275	..	..	..	Ci., Cu., W.
18	17	19.	770.75	30.250	64.9	30.336	30.236	..	63.5	54.2	.323	63.	330	.1	..	..	Ci., Cu., W.
19	18	19.2	771.55	30.280	65.	30.382	30.282	..	59.3	51.4	.298	65.2	303	1.0	..	..	Ci., Cu., W.
20	19	18.9	771.55	30.281	65.	30.382	30.282	..	57.5	50.5	.299	67.	330	..	..	..	Ci., Cu., W.
21	20	18.3	772.00	30.300	64.	30.404	30.307	..	61.8	47.7	.298	74.	330	..	..	..	Ci., Cu., Ci-cu.
22	21	18.1	772.25	30.312	63.5	30.410	30.315	..	50.	46.	.280	73.5	330	..	..	..	Ci., Cu.
23	22	17.5	771.05	30.268	62.7	30.400	30.308	44.	46.8	44.1	.274	77.	314	..	..	..	Ci., Cu.
	23	17.1	771.15	30.275	61.9	30.342	30.251	39.5	46.2	43.6	.270	80.	313	..	..	..	Ci., Cu.

Observed dew point: 3h., 42°; 9h., 43°; 2; 15h., 40°; 6; 21h., 40°; 5.

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

[97]

984

Date.	Barometer No. 1.				Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Dir., degrees.			Force, lbs.				
8	0	16.3	771.10	30.275	61.	30.382	30.293	41.	45.5	42.9	.264	82.4	283	..	..	.2	Ci, Cu.
	1	16.	771.90	30.308	60.	30.384	30.298	41.	44.5	43.	.277	89.	283	..	..	.4	Ci., Cu.
	2	15.8	771.90	30.310	59.2	30.380	30.297	41.8	46.	44.2	.285	89.	247	..	..	.7	Ci., Cu.
	3	15.8	771.95	30.312	59.	30.382	30.299	..	46.5	44.5	.286	88.5	255	..	..	1.0	Ci-s., Ci-cu.
	4	15.5	772.35	30.328	59.	30.396	30.313	..	47.	44.6	.283	87.3	250	..	..	1.0	Ci s., Ci cu.
	5	15.	772.40	30.333	58.8	30.402	30.319	..	48.4	45.	.275	86.	260	..	..	1.4	Ci s., Ci-cu.
	6	15.	772.60	30.311	58.5	30.410	30.328	..	49.8	46.	.283	86.	260	..	..	1.0	Ci s., Ci-cu.
	7	15.	772.80	30.351	57.5	30.420	30.341	..	51.8	48.	.306	82.	260	..	..	1.0	Ci-s., Ci-cu.
	8	15.	772.60	30.341	57.4	30.408	30.329	..	52.4	48.	.299	83.6	260	.2	..	1.0	Ci-s., Ci-cu.
	9	15.1	772.75	30.347	57.7	30.418	30.338	..	54.8	50.8	.338	81.3	275	.2	..	1.0	Ci-s., Ci-cu.
	10	15.6	772.45	30.332	58.	30.408	30.327	..	58.	52.3	.339	76.5	260	.7	..	1.0	Ci s., Ci cu.
	11	16.2	772.35	30.325	59.	30.400	30.317	..	61.6	55.4	.377	76.	290	.6	..	1.0	Ci s., Ci cu.
	12	17.2	772.05	30.308	60.5	30.387	30.300	..	63.	56.5	.391	75.5	290	.5	..	1.0	Ci s., Ci-cu.
	13	18.	771.50	30.283	62.	30.370	30.279	..	66.	58.3	.406	73.	290	.5	..	1.0	Ci-s., Ci-cu.
	14	18.8	771.40	30.275	63.1	30.362	30.268	..	66.5	58.7	.424	75.	290	1.0	..	1.0	Ci-s., Ci-cu.
	15	19.	770.80	30.251	64.2	30.338	30.241	..	64.4	58.4	.428	77.	290	.6	..	1.0	Ci s., Ci cu, N.
	16	19.2	770.60	30.242	65.	30.330	30.230	..	63.	57.7	.425	80.	290	.6	..	1.0	Ci-s., N.
	17	19.2	770.00	30.219	65.3	30.312	30.217	..	61.9	57.9	.442	82.2	285	1.2	..	1.0	Ci s., N.
	18	19.1	770.40	30.235	65.5	30.326	30.225	..	60.5	58.5	.475	84.2	260	.7	..	1.0	Ci-s., N.
	19	19.	770.30	30.232	65.3	30.322	30.221	..	59.5	57.	.445	85.	270	.6	..	1.0	Ci-s., N.
	20	18.7	769.80	30.215	64.9	30.300	30.200	..	58.	57.	.462	89.	270	1.0	..	1.0	Ci-s., N.
	21	18.6	769.45	30.199	64.6	30.280	30.182	..	57.	57.	.473	90.5	246	1.2	..	1.0	Raining, N.
	22	18.2	768.80	30.175	61.2	30.260	30.163	..	57.	56.	.446	92.	266	1.0	..	1.0	Raining, N.
23	18.	767.00	30.107	63.9	30.228	30.133	..	57.1	56.3	.463	92.	120	.9	..	1.0	Raining, N.	

Observed dew point: 3h., 43° 5; 9h., 46° 6; 15h., 52° 8.

JUNE.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.		Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Bausmeur's.		Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Force of vapor, ins.	Dir., degrees.	Force, lbs.				
1842	9	0	17.7	766.85	30.103	63.3	30.188	30.094	...	57.1	56.6	.461	98.	1.0	.08	1.0 N., raining.	
	1	17.9	766.25	30.078	63.	30.182	30.069	...	58.1	57.6	.477	91.8	.2	.02	1.0 N., raining.		
	2	17.8	765.45	30.047	63.	30.124	30.031	...	59.	58.5	.492	92.	.1	.02	1.0 N., raining.		
	3	18.2	764.60	30.011	63.1	30.088	29.995	...	59.4	59.	.502	91.2		.01	1.0 N., raining.		
	4	18.	764.25	29.999	63.1	30.080	29.987	...	59.5	59.	.500	91.9		.01	1.0 N., raining.		
	5	18.	763.85	29.983	63.2	30.064	29.971	...	59.2	59.	.504	91.9		.02	1.0 N., raining.		
	6	17.9	763.80	29.981	63.1	30.064	29.971	...	59.	58.5	.492	91.2			1.0 N.		
	7	18.1	763.55	29.971	63.	30.052	29.959	...	60.	59.5	.509	91.5			1.0 N.		
	8	18.3	763.25	29.957	63.	30.040	29.947	...	60.9	60.3	.521	91.		.01	1.0 N., rain.		
	9	18.4	763.05	29.949	63.8	30.030	29.935	...	63.	62.	.548	91.5			1.0 N., S.		
	10	18.7	762.75	29.937	64.	30.020	29.925	...	65.4	63.7	.572	90.5			1.0 N., S.		
	11	19.1	762.70	29.932	64.7	30.020	29.923	...	66.7	64.5	.582	89.5			1.0 N., Ci-s., W.		
	12	19.7	762.60	29.926	65.5	30.012	29.913	...	68.6	65.6	.596	87.			1.0 N., Ci-s., Ci-cu., W.		
	13	20.3	761.90	29.896	66.6	29.984	29.882	...	71.5	67.3	.619	84.5			1.0 N., Ci-s., Ci-cu., W.		
	14	21.	761.55	29.879	68.	29.973	29.867	...	74.1	69.5	.664	82.5			.9 Ci., Ci-cu., WSW.		
	15	21.9	761.20	29.860	69.	29.956	29.847	...	74.5	69.4	.655	82.2			1.0 Ci., Ci-cu., Cu., WSW.		
	16	22.2	761.00	29.850	70.2	29.950	29.839	...	73.	67.5	.610	82.			.9 Ci., Cu., WSW.		
	17	23.	760.30	29.820	71.3	29.910	29.795	...	75.2	69.8	.660	82.			.5 Ci., Cu., WSW.		
	18	23.5	760.20	29.814	73.3	29.909	29.789	...	75.5	70.5	.682	82.2			.7 Ci., Cu., WSW.		
	19	23.	759.70	29.796	73.	29.900	29.781	...	73.5	70.	.687	85.			.6 Ci., Cu., WSW.		
	20	23.3	759.25	29.777	73.	29.870	29.751	...	69.	66.5	.620	90.			.3 Ci., Cu., WSW.		
	21	23.5	759.45	29.783	73.	29.888	29.769	...	68.7	67.5	.656	92.			.9 Cu., Ci., WSW.		
	22	23.2	758.15	29.733	73.	29.872	29.753	...	67.5	66.2	.627	92.2			.1 Cu., Ci., WSW.		
	23	23.	756.80	29.761	72.6	29.858	29.740	...	67.5	66.8	.647	92.			.7 Cu., W.		

Observed dew point: 9h., 61° 2, 15h., 67°.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hyg. Measures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.			
10	22.8	758.25	29.740	72.2	29.856	29.739	...	67.6	67.	.652	42	..	..	1.0	Cl., S.
11	22.8	757.90	29.727	72.2	29.824	29.707	...	67.2	66.2	.631	41	..	..	1.0	Cl., S.
12	22.6	757.15	29.698	72.	29.840	29.723	...	66.6	66.5	.647	95	..	.25	1.0	N., raining.
13	22.5	756.55	29.676	71.5	29.782	29.667	...	65.2	64.8	.609	30	..	.17	1.0	N., raining.
14	22.3	756.40	29.671	71.3	29.770	29.655	...	63.7	63.	.570	30	..	..	1.0	N., raining.
15	23.	756.45	29.675	71.	29.772	29.659	...	63.2	62.7	.566	30	..	..	1.0	N., raining.
16	21.8	756.50	29.678	70.6	29.778	29.666	...	64.	63.4	.579	130	..	.01	1.0	N., raining.
17	21.7	756.50	29.678	70.	29.780	29.669	...	64.6	64.	.590	130	..	.35	1.0	N., raining.
18	21.7	756.65	29.684	70.	29.784	29.673	...	66.3	64.5	.587	130	..	.01	..	Cu., Ci-cu.
19	21.8	756.50	29.677	70.	29.776	29.666	86.	67.7	65.7	.610	70	..	..	.4	Cu., Ci-cu., W.
20	22.6	756.70	29.673	71.	29.776	29.663	92.	71.5	67.	.609	83.7	..	..	.4	Cu., Ci-cu., W.
21	23.1	756.70	29.679	71.8	29.780	29.664	94.	73.7	66.3	.563	76.	.5	..	.7	Cu., Ci-cu., (1) NW., (2) SW.
22	24.	756.30	29.657	73.	29.765	29.647	94.2	74.7	67.7	.597	60	.6	..	.4	Cl., Ci-cu., W.
23	24.	756.70	29.631	73.5	29.744	29.625	94.5	75.8	68.	.595	74.	.5	..	.4	Cu., W.
24	24.6	755.50	29.624	74.2	29.784	29.612	93.3	76.5	67.	.554	80	1.0	..	.3	Cu., W.
25	25.2	755.55	29.623	76.	29.736	29.612	90.	76.5	64.5	.475	70	1.7	..	.2	Cu., W.
26	25.6	755.60	29.623	76.	29.736	29.610	87.3	76.5	64.3	.469	65	1.6	..	.3	Cu., W.
27	25.9	755.80	29.630	76.5	29.756	29.629	...	74.	63.	.455	67.	1.7	..	.3	Cu., W.
28	26.2	756.35	29.650	77.	29.770	29.641	...	72.5	62.	.442	65.	1.8	..	.1	Cu.
29	26.	756.90	29.673	77.	29.800	29.670	...	70.	60.	.411	65	100	2.2	..	Cu. at Hor.
30	24.7	757.75	29.712	75.8	29.830	29.703	...	65.	57.4	.395	70.8	2.0	..	..	Cu. at Hor.
31	24.8	756.55	29.743	74.5	29.856	29.738	60.5	62.5	56.2	.390	72.	2.0	..	..	Cu. at Hor.
32	23.2	758.70	29.763	73.2	29.872	29.753	56.5	59.7	54.5	.377	73.	2.0	..	..	Clear.
33	22.2	758.00	29.732	71.7	29.876	29.761	55.	57.6	53.5	.376	63	1.0	..	..	Clear.

Observed dew point: 8h., 63°.5; 9h., 67°; 10h., 59°.4; 21h., 51°.

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.		Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Gausses's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
Day.	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
11	0	21.4	758.85	29.771	70.3	29.874	29.762	51.5	56.5	52.9	.371	82.	127	1.0	.	.3	Cu.
	1	20.8	758.15	29.745	69.1	29.882	29.773	51.5	54.	49.5	.316	79.	145	1.0	.	.1	Cu., S.
	2	20.	759.25	29.792	67.6	29.888	29.784	50.	53.1	48.5	.303	79.	150	2.0	.	.2	S.
	3	18.4	760.15	29.836	66.	29.896	29.795	...	50.	45.3	.262	77.5	155	1.2	.	.5	Cl., Cu., Ci-a.
	4	18.	760.85	29.866	65.5	29.924	29.825	...	47.4	42.5	.232	77.	140	3.0	.	.3	Cu., Ci-a.
	5	18.	761.45	29.889	62.	29.958	29.868	...	46.3	41.4	.222	76.	145	2.5	.	.4	Cu., Ci-a.
	6	18.	762.00	29.910	61.8	29.984	29.894	...	45.6	40.8	.218	75.5	145	1.5	.	.1	Cu.
	7	16.4	763.10	29.961	60.8	30.088	29.951	...	46.4	41.	.212	76.	155	2.0	.	1.0	Cu., Ci-cu.
	8	16.2	763.40	29.974	60.3	30.050	29.964	...	47.3	40.	.181	74.	150	2.5	.	.7	Cu., Ci-cu.
	9	15.8	763.50	29.979	59.8	30.056	29.972	60.3	48.	41.	.196	70.7	150	2.8	.	.1	Cu., NNW.
	10	15.3	763.66	29.988	59.2	30.060	29.978	64.	49.5	42.1	.201	69.	150	2.6	.	.1	Cu., NNW.
	11	15.6	763.50	29.980	59.	30.056	29.974	66.	51.6	44.1	.231	68.5	150	2.3	.	...	Small Cu., NNW.
	12	15.7	763.50	29.980	59.	30.056	29.974	67.5	53.5	45.5	.230	68.	135	2.7	.	...	Clear.
	13	15.9	763.50	29.979	59.	30.056	29.974	69.5	55.2	46.4	.281	65.5	125	2.8	.	...	Clear.
	14	16.1	763.65	29.984	59.2	30.060	29.978	68.	56.7	47.7	.244	63.5	130	2.6	.	...	Clear.
	15	16.6	764.00	29.996	59.7	30.070	29.986	68.	58.	48.	.237	62.	130	2.8	.	...	Clear.
	16	17.1	764.40	30.010	60.5	30.084	29.998	68.5	59.5	49.5	.255	61.	130	1.8	.	...	Clear.
	17	18.	764.50	30.009	61.5	30.090	30.002	...	60.4	51.5	.293	59.8	115	1.2	.	...	Clear.
	18	18.2	765.10	30.030	62.2	30.112	30.022	...	60.5	49.5	.242	59.2	140	.3	.	...	Clear.
	19	18.2	765.60	30.050	62.8	30.130	30.037	...	59.8	50.	.265	58.9	130	.	.	...	Clear.
	20	17.4	*766.40	30.066	62.4	30.128	30.077	...	52.2	47.5	.289	68.8	130	.	.	...	Clear.
	21	16.6	766.90	30.110	61.4	30.178	30.090	...	50.	46.	.280	76.	130	.	.	...	Clear.
	22	16.3	767.60	30.139	60.5	30.216	30.130	43.	47.5	44.6	.377	80.2	130	.	.	...	Clear.
	23	...	...	+30.160	...	...	+30.150	...	+46.	...	+260	+85.	...	.	.	...	Clear.

* Recorded 764.40.

+ Supplied.

Observed dew point: 3h., 40° 5; 9h., 31° 8; 15h., 36° 5.

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

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Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Gaussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
13	12.2	765.65	30.082	62.3	30.132	30.043	56.2	53.	.369	88.3	356	..	..	..	Clear.
14	11.1	765.20	30.069	60.2	30.116	30.031	49.	52.2	.365	90.	350	..	..	..	Clear.
15	11.9	764.45	30.036	61.2	30.094	29.996	49.	52.4	.370	91.5	323	..	..	..	Clear.
16	12.5	764.15	30.022	60.	30.068	29.983	49.	53.	.384	92.	325	..	..	..	Clear.
17	14.3	763.85	30.000	59.4	30.056	29.973	48.5	53.7	.403	92.5	330	..	..	..	Clear.
18	15.	763.95	30.001	59.7	30.068	29.985	..	54.	.412	93.	330	..	.4	..	Clear.
19	16.2	764.00	29.998	59.8	30.072	29.987	..	55.	.429	93.	330	..	1.0	..	Clear.
20	16.5	764.00	29.997	61.	30.074	29.987	..	63.5	.413	86.	345	..	1.0	..	Clear.
21	18.2	763.75	29.977	60.8	30.074	29.987	..	66.3	.541	84.	350	..	1.0	..	Clear.
22	18.7	763.75	29.963	62.8	30.064	29.971	83.5	70.	.549	80.	30	1.0	..	..	Clear.
23	19.3	763.30	29.955	65.1	30.044	29.946	86.	72.7	.595	80.	20	1.2	..	..	Clear.
24	20.2	762.65	29.925	66.7	30.020	29.918	85.	75.1	.528	77.7	15	1.0	..	..	Clear.
25	20.9	762.50	29.916	68.	30.011	29.908	86.	75.6	.630	77.	15	1.3	..	..	Clear.
26	21.5	762.45	29.912	69.	30.010	29.901	89.	77.3	.663	77.	0	1.6	..	..	Clear.
27	22.	762.00	29.891	70.	29.988	29.877	90.7	76.	.646	78.5	350	2.2	..	..	Clear.
28	22.9	762.00	29.887	71.	29.988	29.874	89.5	76.	.646	79.3	350	2.3	..	..	Clear.
29	23.2	762.00	29.884	72.1	29.990	29.873	..	73.3	.618	84.2	10	2.8	..	..	Clear.
30	23.	762.40	29.902	72.6	30.012	29.894	..	71.2	.659	88.7	10	1.0	..	..	Clear.
31	23.	762.75	29.916	72.7	30.021	29.906	..	66.5	.606	94.	45	2	.25	..	Clear.
32	22.8	763.70	29.954	72.2	30.058	29.941	..	64.5	.501	92.5	70	2	..	..	Clear.
33	22.5	763.51	29.949	72.	30.052	29.935	..	64.	.573	92.3	70	..	.27	..	Clear.
34	22.2	763.25	29.938	71.7	30.040	29.925	..	63.8	.572	92.7	71	..	.05	..	Clear.
35	22.	764.00	29.970	71.1	30.062	29.948	..	63.7	.561	92.9	71	..	..	..	Clear.

Observed dew point: 3h., 51°; 9h., 60°; 8., 15h., 65°; 5., 21h., 62°; 4.

JUNE.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.		Dir., degrees.	Force, lbs.			
14	0 21.8	761.00	29.971	70.7	30.062	29.950	...	63.6	62.5	556	92.6	.01	1.0	N., drizzling.
1	21.6	764.00	29.971	70.4	30.060	29.948	...	63.1	62.3	555	92.5	...	1.0	N.
2	21.4	764.00	29.973	70.	30.062	29.951	...	62.9	62.	549	92.	...	1.0	N.
3	21.4	764.20	29.981	69.4	30.072	29.962	...	63.5	61.8	547	92.7	...	1.0	N., drizzling.
4	21.2	764.50	29.994	69.	30.084	29.975	...	62.4	62.	555	93.	...	1.0	N.
5	21.	764.85	30.008	68.3	30.096	29.989	...	62.7	62.2	557	93.	...	1.0	N., S.
6	20.8	765.00	30.013	68.5	30.150	29.993	...	63.	62.5	562	93.	...	1.0	N., S.
7	20.7	765.45	30.033	68.4	30.130	30.023	...	64.3	63.	563	92.3	...	1.0	Cl-s, S.
8	20.7	765.60	30.039	68.4	30.134	30.027	...	65.	63.5	571	92.	...	1.0	Cl-s, S.
9	20.9	765.50	30.034	68.4	30.124	30.017	...	65.8	63.8	571	91.	...	1.0	N., Cl-s, S.
10	20.9	765.50	30.034	68.4	30.124	30.017	...	66.	63.8	568	89.7	...	1.0	Cl-s, S.
11	21.1	765.60	30.037	68.8	30.134	30.026	...	68.1	65.	582	87.4	...	1.0	Cu, Cl-s, S.
12	21.4	765.60	30.036	69.	30.132	30.023	...	69.2	65.3	579	86.	...	1.0	Cu, Cl-s, S.
13	21.5	765.35	30.026	69.5	30.122	30.012	...	68.5	66.	610	90.	...	1.0	Cl-s, N.
14	21.9	765.20	30.017	70.	30.116	30.005	...	70.	67.	625	87.3	...	1.0	Cl-s, N.
15	22.3	765.00	30.007	70.5	30.110	29.998	...	71.8	67.8	632	85.5	...	1.0	Cl-s, N.
16	22.6	764.70	29.995	71.	30.100	29.986	...	72.	68.2	643	86.	...	.9	Cu, N.
17	22.9	764.70	29.994	71.9	30.100	29.983	...	70.5	67.4	633	86.8	...	1.0	Cl-s, N.
18	22.4	764.80	29.999	72.	30.108	29.991	...	69.5	68.5	661	87.	...	1.0	Cl-s, N.
19	22.4	764.80	29.999	72.	30.108	29.991	...	68.8	66.5	622	88.	...	1.0	Cl-s, N.
20	22.5	764.80	29.999	71.7	30.108	29.993	...	66.8	65.	597	92.	...	1.0	Cl-s, N.
21	22.3	764.95	30.006	71.5	30.110	29.995	...	66.	64.5	590	91.	...	1.0	Cl-s, N.
22	22.2	764.90	30.004	71.3	30.096	29.981	...	65.9	64.5	591	91.	...	1.0	Cl-s, N.
23	22.1	764.90	30.005	71.	30.096	29.982	...	65.3	64.1	585	92.3	...	1.0	Cl-s, N. drizzling.

Observed dew point: 3h., 61° 5; 9h., 61° 2; 15h., 65°; 21h., 63°.

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.				Barometer No. 2.			Thermometers, Fah.			Hygr., Saunsaure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Force of vapor, ins.		Dir., degrees.	Force, lbs.			
15	0 22.	764.60	29.994	70.9	30.086	29.972	....	64.9	64.	.587	93.	304	..	..	1.0	N., drizzling.
	1 21.8	764.45	29.989	70.6	30.082	29.970	....	64.5	63.8	.585	93.2	304	..	..	1.0	N., drizzling.
	2 21.6	764.10	29.975	70.	30.070	29.959	....	64.1	63.5	.581	93.5	304	..	..	1.0	N., drizzling.
	3 21.5	764.20	29.981	69.8	30.078	29.967	....	64.	63.5	.582	93.5	304	..	..	1.0	N., drizzling.
	4 21.5	764.35	29.987	69.5	30.080	29.970	....	64.2	63.5	.580	93.5	304	..	.02	1.0	N., raining.
	5 21.3	764.35	29.987	69.2	30.084	29.975	....	64.5	63.7	.582	93.2	304	..	..	1.0	N., raining.
	6 21.2	764.45	29.992	69.2	30.088	29.979	....	64.5	63.7	.582	93.2	304	..	..	1.0	N., S.
	7 21.3	764.80	30.005	69.	30.092	29.983	....	65.7	64.6	.597	92.7	304	..	..	1.0	N., S.
	8 21.3	764.80	30.005	69.	30.092	29.983	....	67.2	66.	.625	92.7	304	..	..	1.0	N., S., raining.
	9 21.4	764.75	30.003	69.2	30.094	29.985	....	67.8	66.7	.641	92.8	304	..	.04	1.0	N., S., raining.
	10 22.	764.55	29.992	70.	30.088	29.977	....	72.2	69.5	.685	89.3	300	..	..	1.0	Cl-s, S.
	11 22.8	764.30	29.978	71.3	30.080	29.965	....	75.5	71.7	.726	86.3	330	..	..	.9	Cl, Cl-cu., Cu., S.
	12 23.3	764.00	29.963	72.3	30.066	29.948	....	76.5	72.5	.744	86.	335	..	..	1.0	Cl cu., N., S.
	13 23.8	763.60	29.944	72.2	30.050	29.932	....	74.5	71.5	.739	89.3	345	.2	.03	1.0	Cl cu., N., showery, S.
	14 24.	763.30	29.931	74.	30.040	29.918	....	74.8	72.4	.760	89.5	350	.7	.01	1.0	Cl cu., N., showery, S.
	15 24.1	763.00	29.919	74.2	30.030	29.908	....	72.8	69.6	.683	86.7	340	1.0	.01	1.0	Cl cu., N., showery, S.
	16 24.1	763.00	29.919	74.3	30.030	29.908	....	71.6	68.5	.658	88.3	330	2.2	..	1.0	Cl-s, N., S.
	17 24.	762.60	29.904	74.5	30.018	29.895	....	69.1	67.7	.659	92.	330	2.0	.03	1.0	Cl-s, N., showery, S.
	18 23.5	762.25	29.893	74.1	30.004	29.882	....	68.8	67.5	.656	92.	288	.5	.04	1.0	Cl-s, N., showery, S.
	19 23.5	762.00	29.883	74.	29.994	29.872	....	68.	67.	.648	92.	205	.3	.03	1.0	N., showery, S.
	20 23.2	761.50	29.865	73.2	29.960	29.847	....	67.4	66.7	.645	92.	200	..	.04	1.0	N., showery, S.
	21 23.1	761.35	29.859	73.	29.960	29.841	....	67.5	67.	.653	92.	200	..	..	1.0	N., showery.
	22 23.	760.80	29.840	72.9	29.944	29.826	....	68.	67.4	.661	92.	280	..	.01	1.0	Drizzling.
	23 22.9	760.50	29.828	72.2	29.928	29.811	....	67.9	67.2	.656	92.	312	..	.01	1.0	Drizzling.

Observed dew point: 3h., 62°; 15h., 68°.

JUNE.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gaussens's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.						
16	0 22.8	760.50	29.829	72.2	29.930	29.813	...	67.6	67.	.652	332	...	...	1.0 N.	N.
1	1 22.7	760.20	29.817	72.1	29.912	29.795	...	67.5	67.	.653	347	...	...	1.0 N., drizzling.	N., drizzling.
2	2 22.7	760.05	29.811	71.9	29.910	29.793	...	67.5	67.	.653	347	...	...	1.0 N., Ci-s.	N., Ci-s.
3	3 22.9	759.60	29.793	71.6	29.900	29.785	...	67.5	67.	.653	347	...	...	1.0 N., Ci-s.	N., Ci-s.
4	4 22.8	760.00	29.809	71.6	29.910	29.795	...	66.6	66.	.631	355	...	...	1.0 N., Ci-s.	N., Ci-s.
5	5 22.5	760.20	29.818	71.5	29.916	29.801	...	66.5	66.	.631	355	...	...	1.0 Ci-s.	Ci-s.
6	6 22.4	760.75	29.840	71.2	29.938	29.824	...	67.	66.	.627	30	...	...	1.0 Ci-s.	Ci-s.
7	7 22.5	761.15	29.855	71.2	29.960	29.846	...	69.	67.5	.653	30	...	...	.9 Ci-cu, Cu.	Ci-cu, Cu.
8	8 22.7	761.60	29.873	71.2	29.970	29.856	...	71.5	69.	.676	30	...	...	.9 Ci-cu.	Ci-cu.
9	9 23.	761.40	29.863	72.	29.965	29.846	...	72.5	69.	.665	20	...	...	1.0 Ci, Ci-cu.	Ci-s., W. ((2) W.
10	10 23.8	761.50	29.863	73.	29.970	29.851	...	74.	70.5	.700	...	...	...	1.0 Ci, Ci-cu.	Ci-s., W. ((1) NW,
11	11 24.6	761.40	29.855	74.	29.966	29.844	100.	76.8	72.4	.738	...	...	...	.7 Ci, Ci-cu.	do.
12	12 25.2	761.25	29.846	75.5	29.958	29.832	98.	77.	72.5	.738	...	...	...	.7 Ci, Ci-cu.	do.
13	13 25.7	761.10	29.838	76.5	29.950	29.822	97.	80.	75.	.799	...	...	...	.9 Ci, Ci-cu.	Ci-s., W.
14	14 26.	761.00	29.832	77.4	29.950	29.819	91.	78.2	73.	.744	...	...	...	1.0 Ci, Ci-cu.	Ci-s., W.
15	15 26.6	760.70	29.819	77.9	29.934	29.801	95.7	80.7	74.7	.778	...	...	...	1.0 Ci, Ci-cu.	Ci-s., W.
16	16 26.8	760.50	29.810	78.5	29.934	29.800	96.4	78.4	73.5	.758	...	...	...	1.0 Ci, Ci-cu.	Ci-s., W.
17	17 26.5	760.70	29.819	78.8	29.940	29.805	...	77.4	73.5	.770	...	...	...	1.0 Ci, Ci-cu.	Ci-s., W.
18	18 26.	760.70	29.821	78.9	29.940	29.805	...	76.6	73.4	.775	...	...	...	1.0 Ci, Ci-cu.	Ci-s., W.
19	19 26.1	760.85	29.827	78.6	29.944	29.810	...	74.	71.5	.735	...	...	...	1.0 Cu, N., Ci-s.	Ci-s., W.
20	20 26.	761.20	29.840	78.	29.962	29.829	...	72.5	71.	.734	...	...	...	1.0 N., showery.	N., showery.
21	21 26.	761.25	29.842	78.	29.964	29.831	...	72.	70.9	.736	...	...	...	1.0 N., showery.	N., showery.
22	22 25.7	761.00	29.834	77.7	29.942	29.811	...	71.7	70.7	.733	...	...	.02	1.0 N., showery.	N., showery.
23	23 25.6	760.70	29.823	77.3	29.932	29.801	...	71.1	70.1	.718	...	...	...	1.0 N., showery.	N., showery.

Observed dew point: 94., 68°, 15h., 70°.5; 2 1/4h., 69°.8.

JUNE.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
17	25.4	760.64	29.821	77.2	29.928	29.798	...	70.7	.709	92.	224	..	..	1.0	N., drizzling.
1	25.	760.50	29.818	76.6	29.922	29.794	...	70.1	.695	92.2	224	..	..	1.0	N., drizzling.
2	24.9	760.55	29.820	76.1	29.926	29.799	...	70.	.693	92.1	224	..	..	1.0	N., Cu., drizzling.
3	24.8	760.60	29.822	74.7	29.938	29.815	...	69.4	.682	92.	224	..	..	1.0	N., Cu., raining.
4	24.5	760.75	29.831	75.	29.944	29.819	...	69.	.663	92.	225	..	..	1.0	N., Cu., raining.
5	24.3	760.80	29.839	75.5	29.950	29.824	...	69.	.656	92.	225	..	..	1.0	N., Cu.
6	24.2	761.60	29.865	74.7	29.977	29.847	...	69.5	.664	91.8	225	..	..	1.0	N., Cu., raining.
7	24.	761.65	29.867	74.5	29.974	29.851	...	71.5	.703	91.5	225	..	..	1.0	N., Cu.
8	23.8	761.70	29.869	74.	29.976	29.854	...	72.	.704	91.5	225	..	.01	1.0	N., Cu.
9	23.8	761.60	29.866	74.	29.974	29.852	...	72.	.712	92.	45	..	..	1.0	N., raining.
10	24.	761.60	29.865	74.2	29.970	29.848	...	72.7	.750	92.	35	..	..	1.0	N., raining.
11	24.2	761.90	29.877	74.6	29.984	29.861	...	73.6	.737	90.3	20	..	.01	1.0	N., raining.
12	24.4	762.00	29.879	75.	29.986	29.861	...	73.6	.744	92.	25	..	.01	1.0	N., raining.
13	24.5	761.40	29.856	75.1	29.966	29.841	...	73.8	.738	91.	30	..	.01	1.0	N., Cu-s, S.
14	24.6	761.80	29.871	75.2	29.980	29.855	...	73.6	.757	92.	10	..	..	1.0	N., Cu-s, S.
15	24.2	761.80	29.873	75.2	29.980	29.855	...	73.9	.754	92.	10	..	..	1.0	N., Cu-s, raining, SSW.
16	24.5	761.60	29.864	75.2	29.970	29.845	...	74.6	.765	91.	10	..	..	1.0	Ci-s, Ci-cu, N., SSW.
17	24.9	761.50	29.867	75.8	29.972	29.843	...	73.	.707	91.2	10	.6	..	1.0	N., raining, SSW.
18	24.5	761.60	29.864	75.3	29.972	29.846	...	71.8	.707	91.1	5	..	.02	1.0	N., Cu., Cu-s, SSW.
19	24.7	761.60	29.868	75.3	29.972	29.846	...	71.8	.707	91.2	5	..	..	1.0	Cu, Ci cu, Ci, SSW.
20	24.5	761.90	29.876	75.1	29.980	29.855	...	69.5	.681	91.1	355	..	..	.9	Cu, Ci cu, Ci.
21	24.3	761.90	29.876	75.	29.980	29.855	...	69.3	.683	93.	5	..	..	1.0	Cu, N.
22	24.3	761.95	29.878	74.8	29.982	29.857	...	69.1	.682	92.9	5	..	..	1.0	Cu, N.
23	24.2	761.90	29.877	74.5	29.978	29.856	...	69.9	.671	93.	344	..	..	1.0	Cu, N., Ci-s.

Observed dew point: 3h., 67°; 9h., 69°; 15h., 70°; 8; 21h., 67°; 8.

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Gaussure's.	Wind.		Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.		
521														
18	0	761.80	29.873	74.4	29.976	29.853	...	68.7	67.8	667	344	...	1.0	N., drizzling.
	1	761.75	29.872	74.2	29.974	29.852	...	68.5	67.6	.662	344	...	1.0	N., drizzling.
	2	761.15	29.850	73.9	29.950	29.828	...	68.5	67.8	.669	344	...	1.0	N., raining.
	3	760.45	29.823	73.5	29.928	29.808	...	68.5	68.	.675	340	...	1.0	N.
	4	760.50	29.825	73.5	29.932	29.812	...	68.7	68.2	.680	340	...	1.0	N.
	5	760.65	29.832	73.8	29.938	29.818	...	68.8	68.2	.679	340	...	1.0	N.
	6	760.80	29.838	73.8	29.940	29.820	...	70.	69.2	.699	350	...	1.0	N., Cu.
	7	760.65	29.831	73.2	29.932	29.812	...	71.4	70.6	.732	350	...	1.0	N., Cu.
	8	760.75	29.835	73.2	29.938	29.818	...	73.5	72.3	.769	350	...	1.0	N., Cu.
	9	760.55	29.824	73.8	29.932	29.810	...	75.5	73.5	.792	345	...	1.0	Ci.s., N., S.
	10	760.65	29.828	74.2	29.936	29.813	...	75.5	72.5	.756	340	...	1.0	Ci.s., N., S.
	11	760.50	29.820	75.	29.930	29.805	...	75.	72.5	.761	340	...	1.0	Ci.s., N., S.
	12	760.10	29.799	76.2	29.914	29.787	...	78.6	74.3	.788	330	...	.8	Ci., Ci cu., Ci.s., (1) S., (2) S.
	13	759.40	29.769	77.	29.886	29.756	...	80.6	74.5	.773	340	...	.8	Ci., Ci cu., Cu., do. do.
	14	759.10	29.757	77.6	29.872	29.741	...	79.5	73.	.729	340	...	.7	Ci., Cu.s., N., (1) S., (2) W.
	15	758.65	29.739	78.	29.860	29.727	92.	80.	74.	.761	350	...	.7	Ci., Cu.s., N., (1) S., (2) W.
	16	758.60	29.737	78.5	29.856	29.722	...	75.8	72.1	.787	340	...	1.0	Cu.s., N., shower, S.
	17	758.20	29.721	78.6	29.840	29.706	...	76.4	72.5	.744	350	...	.8	Cu.s., N., Cu., Ci cu., S.
	18	758.25	29.723	78.5	29.842	29.708	...	76.8	72.5	.740	330	...	1.0	Cu.s., N., Cu., Ci cu., S.
	19	758.15	29.720	78.2	29.839	29.706	...	78.4	70.	.689	350	...	1.0	Cu.s., N., Cu., Ci., S. by E.
	20	757.75	29.705	77.8	29.826	29.693	...	71.5	69.	.676	306	...	1.0	N., S. by E.
	21	757.50	29.695	77.5	29.810	29.679	...	70.	68.9	.689	255	...	1.0	N., drizzling rain.
	22	756.74	29.674	77.2	29.790	29.660	...	69.4	68.5	.682	225	...	1.0	N., drizzling rain.
	23	756.95	29.680	...	...	29.646	...	69.	...	.680	240	...	...	...

* Supplied.

Observed dew point: 3h., 67° 5; 9h., 72° 3; 15h., 70° 5.

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

[97]

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Day.	Date.	Barometer No 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
		Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
20	0	24.4	759.10	29.765	76.2	29.870	29.743	...	71.6	70.2	.716	90.3	49	...	...	1.0	N, Ci-s.
	1	24.2	759.25	29.772	75.6	29.876	29.750	...	70.7	69.4	.698	90.2	66	...	...	1.0	N, Ci-s., Cu.
	2	24	759.20	29.770	75.1	29.873	29.747	...	69.8	68.6	.683	90.4	60	...	...	1.0	N, Ci-s., Cu.
	3	23.9	759.35	29.777	74.8	29.878	29.753	...	69.5	68.1	.667	90.7	34	...	...	1.0	S, Ci-s.
	4	23.9	759.40	29.779	74.6	29.884	29.761	...	69.4	67.7	.655	91.	34	...	...	1.0	S, Ci-s.
	5	23.8	759.60	29.787	74.2	29.900	29.778	...	69.6	67.5	.647	91.	34	...	...	1.0	S, Ci-s.
	6	23.5	760.90	29.841	73.3	29.942	29.823	...	69.6	66.	.598	83.8	130	...	...	1.0	Cu, Ci-s.
	7	23.3	761.10	29.849	73.	29.950	29.831	...	69.8	66.4	.577	86.	130	...	...	1.0	N, Ci-s., raining.
	8	23.	761.70	29.875	72.7	29.976	29.858	...	68.	65.	.584	88.3	135	...	...	1.0	N, S, Ci-s., raining.
	9	22.9	762.00	29.887	72.5	29.988	29.870	...	69.	66.	.605	89.5	105	...	...	1.0	Cu, Ci-s.
	10	22.8	762.15	29.893	72.4	29.994	29.876	...	70.1	67.	.625	86.	70	...	...	1.0	Ci-cu, Ci-s., N.
	11	22.7	762.30	29.899	72.2	30.000	29.883	...	70.6	67.5	.636	87.3	65	...	...	1.0	Ci-cu, Ci-s., N.
	12	22.7	762.15	29.893	72.	29.992	29.875	...	71.	67.	.615	82.	80	...	...	1.0	Ci-cu, Ci-s., S.
	13	22.7	762.00	29.887	72.	29.990	29.873	...	71.2	67.5	.629	86.	60	...	...	1.0	Ci-cu, Ci-s., S.
	14	23.5	761.80	29.876	73.	29.980	29.861	...	72.	67.2	.611	88.3	70	...	...	1.0	Ci-cu, Ci-s., N.
	15	24.	761.80	29.873	73.3	29.982	29.862	...	75.5	70.	.666	81.	45	...	...	.7	Ci, Ci-cu, Cu., W.
	16	24.2	761.80	29.873	74.	29.982	29.860	...	73.6	68.	.619	81.3	90	...	...	1.0	Ci, Ci-cu, Cu., W.
	17	24.	761.70	29.869	74.5	29.978	29.855	...	72.9	68.	.625	82.5	45	...	...	1.0	Ci, Ci-cu, Cu., W.
	18	24.2	761.95	29.879	74.8	29.997	29.872	...	73.5	68.7	.642	82.8	35	...	...	.3	Ci, Ci-cu, Cu., W.
	19	23.9	762.10	29.885	74.5	30.004	29.881	...	71.	66.4	.594	83.2	35	...	...	.2	Ci, Ci-cu, Cu., W.
	20	24.1	762.80	29.912	74.2	30.033	29.911	...	68.	65.	.583	89.	50	...	...	.6	Ci, Cu., W.
	21	24.	763.20	29.927	74.	30.044	29.922	...	67.4	65.	.590	89.2	50	...	...	.3	Ci, W.
	22	23.8	763.60	29.944	74.	30.052	29.930	...	66.5	64.5	.584	91.	51	...	...	.3	Ci, W.
	23	23.6	763.60	29.946	73.7	30.044	29.924	...	65.2	63.5	.569	91.	51	...	...	.3	Ci, W.

Observed dew point: 3h., 87°; 9h., 85° 5; 15h., 67°; 21h., 51° 5.

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1843.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hygr., Gaussner's.	Wind.	Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.					
21	0 23.1	763.60	30.949	73.1	30.044	29.925	...	64.9	63.6	...	...	...	...
	1 23.7	763.50	30.945	72.5	30.040	29.922	...	63.6	61.8	...	...	...	...
	2 22.7	763.50	30.946	71.8	30.040	29.923	...	63.2	60.7	...	...	...	...
	3 22.9	763.50	30.946	71.3	30.044	29.929	...	63.3	61.5	...	...	...	...
	4 22.5	763.50	30.947	71.	30.044	29.930	...	63.5	61.5	...	...	...	...
	5 22.2	764.40	30.994	70.8	30.084	29.972	...	62.6	61.	...	...	...	...
	6 22.	765.00	30.009	70.1	30.114	30.003	...	64.6	60.8	...	...	...	...
	7 22.5	765.55	30.028	70.5	30.130	30.018	...	65.	59.8	...	...	...	...
	8 23.	765.90	30.040	71.	30.140	30.026	...	67.	57.9	...	...	...	...
	9 23.1	766.00	30.044	71.4	30.152	30.037	...	69.	58.9	...	...	...	...
	10 23.7	766.00	30.039	72.3	30.153	30.034	...	71.6	62.	...	...	...	...
	11 24.	766.00	30.038	72.9	30.152	30.033	...	73.5	63.	...	...	...	...
	12 24.2	765.90	30.084	73.5	30.140	30.020	98.	73.3	62.3	...	...	...	...
	13 24.5	765.40	30.013	74.	30.120	29.998	102.5	75.	64.8	...	...	...	...
	14 25.	764.60	29.979	74.8	30.093	29.969	102.	77.3	67.3	...	...	...	...
	15 25.5	764.50	29.973	76.	30.082	29.955	99.5	79.2	70.	...	...	...	...
	16 25.9	764.40	29.967	76.7	30.062	29.954	96.5	77.	68.8	...	...	...	...
	17 26.	764.15	29.957	77.2	30.074	29.944	...	75.7	67.5	...	...	...	...
	18 25.9	764.15	29.957	77.2	30.076	29.946	...	74.5	67.	...	...	...	...
	19 25.2	764.15	29.960	77.	30.076	29.946	...	73.	67.2	...	...	...	...
	20 24.4	764.15	29.964	76.3	30.076	29.948	...	68.4	65.4	...	...	...	...
	21 23.5	764.35	29.976	74.9	30.084	29.959	...	66.5	64.2	...	...	...	...
	22 23.7	764.35	29.976	74.	30.080	29.958	63.1	65.4	63.6	...	...	...	...
	23 23.9	764.45	29.978	74.	30.080	29.958	61.1	64.6	63.2	...	...	...	...

Observed dew point: 3h., 59°.4; 9h., 52°.6; 15h., 68°; 21h., 61°.8.

JUNE.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hyg., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Dir., degrees.	Force, lbs.			
22	0	23.6	764.00	29.962	73.8	30.070	29.948	59.7	63.7	62.5	28	...	...	...	Clear.
	1	23.3	763.70	29.951	73.4	30.048	29.928	59.6	63.6	62.8	28	...	...	...	Clear.
	2	23.1	763.25	29.935	72.9	30.034	29.915	...	63.5	63.	28	...	...	1.0	S.
	3	23.	763.15	29.931	72.	30.030	29.913	...	63.3	62.9	28	...	...	1.0	N, S, thick fog.
	4	23.2	763.00	29.925	71.7	30.030	29.915	...	64.3	63.8	28	...	...	1.0	N, S, thick fog.
	5	23.4	763.00	29.923	71.4	30.030	29.915	...	65.	64.3	28	...	...	1.0	N, S, thick fog.
	6	23.4	763.00	29.923	71.4	30.030	29.915	...	65.7	65.	28	...	...	1.0	N, S, thick fog.
	7	22.4	763.15	29.933	71.4	30.034	29.919	...	68.	67.4	45	...	...	1.0	N, S, thick fog.
	8	22.8	763.15	29.932	71.7	30.036	29.921	...	71.	68.8	90	...	...	.8	Uu, Ci-s.
	9	23.4	763.00	29.923	72.3	30.024	29.906	...	72.5	69.5	85	...	...	.4	Ci-cu, Ci-s.
	10	24.2	762.90	29.916	73.8	30.024	29.903	93.	75.	70.	40	...	...	.4	Ci, Ci-cu.
	11	24.6	762.60	29.903	74.7	30.012	29.888	98.5	77.5	70.1	40	...	...	.3	Uu, Cu, W. by N.
	12	25.5	762.20	29.881	76.	29.994	29.867	101.	79.5	69.5	40	...	...	.4	Uu, W. by N.
	13	25.9	761.40	29.849	76.5	29.964	29.836	101.7	79.5	72.2	65	...	...	.3	Uu, W.
	14	26.	761.00	29.832	77.2	29.952	29.822	90.5	83.	70.	40	...	...	.5	Uu, Ci, W.
	15	27.2	760.70	29.815	78.	29.933	29.800	97.	81.6	70.6	40	...	...	.3	Uu, Ci, W.
	16	28.	760.30	29.798	79.	29.918	29.783	97.3	82.4	71.	...	...	...	.1	Uu, W.
	17	28.	760.00	29.784	80.	29.906	29.768	...	81.	70.	...	...	...	.4	Uu, Ci, W.
	18	28.	760.10	29.788	80.5	29.921	29.785	...	80.	70.6	...	...	...	.4	Uu, Ci, W.
	19	27.9	760.10	29.788	80.8	29.920	29.779	...	76.	69.2	40	...	...	.1	Uu, Ci, W.
	20	26.4	760.10	29.796	80.	29.922	29.784	...	73.	68.5	45	...	...	.1	Ci, Ci-s.
	21	26.1	760.10	29.797	79.	29.922	29.787	...	73.	68.5	45	...	...	.1	Ci, Ci-cu.
	22	25.4	759.90	29.793	78.2	29.920	29.787	...	71.2	68.4	46	...	...	.1	Ci, Ci-cu.
	23	25.1	758.25	29.729	77.3	29.880	29.749	...	70.6	68.4	46	...	...	.1	Ci-s, Ci-cu.

Observed dew point: 3h., 62° 5; 9h., 67°; 15h., 69°; 21h., 65°.

[1842.]

DAILY METEOROLOGICAL OBSERVATIONS.

[June.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Beaumure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.					
23	0	24.5	759.15	29.767	76.6	29.876	29.748	...	70.6	68.2	65	...	...	.3	Cl., W.
	1	24.1	758.75	29.753	75.8	29.864	29.737	...	70.6	68.3	48	...	...	.8	Cl-cu., Cl-s., W.
	2	24.	758.35	29.738	75.3	29.846	29.720	...	69.8	68.6	48	...	...	.8	Cl-cu., Cl-s., W.
	3	24.8	757.60	29.706	75.	29.816	29.691	...	70.	69.	48	...	...	1.0	Cu., Cl-s., W.
	4	23.2	757.20	29.698	74.8	29.800	29.675	...	70.4	69.2	50	...	...	1.0	Cu., Cl-s.
	5	24.7	757.20	29.690	74.8	29.804	29.679	...	70.5	69.3	50	...	...	1.0	Cu., Cl-s.
	6	24.8	757.50	29.702	75.4	29.816	29.690	...	71.6	70.8	50	...	...	1.0	N., raining.
	7	24.8	757.40	29.698	75.4	29.820	29.694	...	72.7	71.7	50	...	.03	1.0	N., raining.
	8	24.5	757.60	29.703	75.7	29.832	29.696	...	73.5	72.4	50	...	...	1.0	N., Cl-s., S.
	9	24.9	757.10	29.684	75.8	29.800	29.673	...	74.3	71.3	130	...	...	1.0	Cl-s., Cu-s., W.
	10	25.2	757.60	29.703	76.	29.818	29.691	...	75.2	70.7	170	...	...	1.0	Cl-s., Cu-s., W.
	11	25.4	757.85	29.712	76.4	29.828	29.698	...	74.2	69.7	170	...	...	1.0	Cl-s., N., W.
	12	25.7	757.40	29.693	77.	29.805	29.675	...	75.4	69.3	205	...	...	1.0	Cl-s., Cu., N., W.
	13	26.	757.10	29.680	77.1	29.796	29.666	...	75.5	69.	200	...	...	1.0	Cl-s., Cu., N., W.
	14	26.	756.95	29.674	77.5	29.790	29.659	...	73.5	70.	149	...	...	1.0	Cl-s., Cu., N., W.
	15	26.	756.90	29.672	77.6	29.794	29.653	...	73.5	70.6	145	...	.01	1.0	Cl-s., Cu., N.
	16	26.	756.50	29.658	77.7	29.774	29.643	...	73.	69.5	145	...	...	1.0	Cl-s., Cu., N.
	17	26.	756.50	29.666	77.7	29.774	29.643	...	73.	70.	165	...	...	1.0	Cl-s., Cu., N., raining.
	18	25.	756.85	29.674	77.	29.792	29.662	...	63.5	62.5	270	...	.03	1.0	N., raining, NE.
	19	24.3	757.35	29.697	76.	29.812	29.685	...	62.5	61.8	250	...	.01	1.0	N., showery, NE.
	20	23.9	758.65	29.750	74.5	29.832	29.739	...	62.	60.5	240	...	...	1.0	N., NE.
	21	23.7	758.95	29.764	73.9	29.878	29.756	...	61.8	59.8	245	...	...	1.0	N., NE.
	22	23.2	759.35	29.780	73.	29.882	29.763	...	61.	59.5	230	...	...	1.0	N., NE.
	23	22.9	759.50	29.789	72.4	29.890	29.772	...	61.5	59.5	210	...	...	1.0	N., NE.

Observed dew point: 21h., 54° 2.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.	Dir., degrees.	Force, lbs.			
24	0	22.5	759.75	29.800	71.7	29.900	29.785	...	60.5	59.5	212	...	...	1.0	N. Ci-s, drizzling.
	1	22.2	759.75	29.801	71.1	29.900	29.786	...	60.5	59.	224	...	...	1.0	N., N.
	2	21.8	759.90	29.810	70.6	29.910	29.798	...	60.2	58.9	222	...	...	.7	Cu., N.
	3	21.9	759.75	29.803	70.	29.904	29.793	...	60.	59.	225	...	...	.7	Cu., N.
	4	21.7	760.10	29.818	69.6	29.916	29.806	...	60.3	59.	225	...	...	1.0	Cu., N.
	5	21.6	760.30	29.827	69.2	29.924	29.815	...	60.5	59.5	225	...	...	1.0	Cu., N.
	6	20.9	760.35	29.832	68.8	29.924	29.816	...	61.	59.4	227	...	...	1.0	Cl., Cu.
	7	21.2	761.50	29.876	68.4	29.968	29.861	...	61.6	59.6	227	...	...	1.0	Cl., Cu.
	8	21.	761.75	29.887	68.3	29.982	29.875	...	62.	59.8	192	...	...	1.0	Cl., Cu.
	9	21.	761.90	29.893	68.5	29.990	29.883	...	64.4	61.4	220	...	...	.8	Cl., Cu., N.
	10	21.	762.00	29.896	68.6	29.990	29.883	...	67.5	64.	180	...	...	.9	Cl., Cu., N., NNE.
	11	22.	762.10	29.895	69.3	29.994	29.884	...	70.1	64.6	325	...	...	.8	Cl., Cu., N., N.
	12	22.5	762.10	29.892	70.1	29.994	29.883	...	71.5	65.5	10	...	...	.8	Cl., Cu., N.
	13	22.9	761.80	29.880	71.	29.984	29.870	...	72.4	64.8	55	...	...	.9	Cl., Cu., N.
	14	23.5-	761.95	29.883	72.	29.984	29.871	...	74.3	66.1	120	...	...	.7	Cl., Cu., N.
	15	24.	761.90	29.877	73.	29.984	29.865	...	75.	67.	310	...	...	.5	Cl., Cu., N.
	16	24.5	761.65	29.865	73.6	29.976	29.856	...	76.1	64.7	483	...	...	.4	Cl., Cu., N.
	17	25.	761.60	29.861	74.5	29.976	29.853	...	75.4	63.7	160	...	...	.4	Cl., Cu., N.
	18	25.	761.75	29.867	74.9	29.984	29.859	...	73.8	64.	115	...	...	.1	Cu., N.
	19	24.3	761.75	29.870	74.8	29.986	29.862	...	72.5	63.5	115	...	...	.1	Cl., Cu.
	20	24.2	762.15	29.886	73.9	30.000	29.878	...	66.9	61.3	118	...	...	.1	Cl., Cu.
	21	22.2	762.30	29.901	72.2	30.012	29.895	...	63.5	59.8	115	...	...	.1	Cl., Cu.
	22	21.7	762.65	29.918	71.	30.016	29.902	...	62.4	59.7	87.8	...	...	.2	Cl., Cu.
	23	21.3	762.70	29.922	70.4	30.016	29.904	...	61.6	59.5	68	...	...	..	Clear.

Observed dew point: 9h., 60°.5; 15h., 56°.5; 21h., 57°.2.

[June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.		
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.		Dir., degrees.	Force, lbs.					
25	0	21.4	762.36	29.908	70.4	30.004	29.892	62.3	61.5	60.4	.518	89.8	68	..	..	Clear.	
	1	21.9	763.40	29.907	70.6	30.004	29.892	..	63.2	62.7	.566	89.6	68	..	..	Slight fog.	
	2	21.9	762.35	29.905	70.6	29.996	29.884	..	63	62.5	.562	89.4	70	..	1.0	S, dense fog.	
	3	21.6	762.45	29.910	70.4	29.998	29.886	..	63.8	62.2	.556	89.2	120	..	1.0	S, dense fog.	
	4	21.4	762.70	29.910	70.2	30.008	29.897	..	63.7	62	.551	89	95	..	1.0	S, dense fog.	
	5	21.6	762.85	29.910	70	30.013	29.902	..	63	62.1	.551	89	55	..	1.0	S, dense fog.	
	6	21.7	762.90	29.926	69.8	30.020	29.909	..	63.2	62.3	.555	89	55	..	1.0	S, dense fog.	
	7	21.8	763.15	29.928	69.8	30.020	29.909	..	63.2	62.3	.555	89	55	..	1.0	S, dense fog.	
	8	21.8	762.90	29.936	70	30.030	29.919	..	68.7	66.7	.630	88.3	55	..	1.0	S, dense fog.	
	9	22.3	762.90	29.925	70.5	30.020	29.908	..	70.5	66.5	.603	86	20	..	.3	Cl, Cu, W.	
	10	23	762.45	29.922	71.5	30.020	29.905	91.5	71.8	67.7	.628	84.5	25	..	.7	Cl, Cu, Cu-a, W.	
	11	23.2	761.70	29.903	72.5	30.010	29.892	92	72.9	64.7	.519	79	55	..	.7	Cl, Cu, Cu-a, W.	
	12	24	761.30	29.870	73.3	29.980	29.860	94.5	74.3	65.3	.522	78.5	15	2	..	.8	Cl, Cu, W.
	13	24.4	760.70	29.862	74	29.962	29.840	89	73.8	65.6	.538	79	25	3	..	.8	Cl, Cu, Cu-a.
	14	24.8	760.40	29.828	74.8	29.940	29.816	87	75.1	64.7	.494	77	20	5	..	.8	Cl, Cu, Cu-a.
	15	24.9	759.80	29.815	75	29.926	29.801	..	74.4	66.4	.556	79	20	1.0	..	.9	Cl, Cu, Cu-a.
	16	25	759.80	29.791	75.2	29.910	29.785	..	71.6	64	.512	79.3	20	2.0	..	1.0	Cl-cu, Cl-a.
	17	25	759.80	29.791	75.2	29.910	29.785	..	73.4	65.7	.546	79.5	10	1.6	..	.8	Cl, Cu, Cu-a, W.
	18	25	759.50	29.778	75.4	29.893	29.767	..	70.8	64.7	.543	80.5	5	1.7	..	.2	Cl, Cu, Cu-a, W.
	19	24.2	759.50	29.762	75	29.893	29.768	..	68	62.2	.498	82.8	5	1.0	..	.9	Cl, Cu, Cu-a, W.
	20	24	758.75	29.763	74.1	29.860	29.738	..	67	63	.533	85.1	5	5	..	1.0	Cl, Cu, Cu-a, W.
	21	23.6	758.60	29.760	73.7	29.850	29.730	..	66.1	63.1	.546	86.2	352	5	..	1.0	Cl-cu, Cu-a, W.
	22	23.5	758.45	29.744	73.4	29.842	29.722	..	66.1	63.6	.561	88.9	360	..	..	1.0	Cl-cu, Cu-a, W.
	23	*29.740	*29.720	..	*66.1	*.575	*89.2	350

* Supplied.

July.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

[97]

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Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Force of vapor, ins.	Hygr., Sausures.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.			Dir., degrees.	Force, lbs.			
27	0 25.3	755.05	29.602	78.2	29.718	29.598	63.	68.9	66.7	.628	87.8	200	..	..	.2	Ci, Ci-s.
	1 23.9	755.00	29.606	76.	29.712	29.597	...	68.6	66.4	.621	87.8	197	..	..	.4	Ci-cu., Ci-s.
	2 23.2	754.75	29.602	74.3	29.706	29.585	...	68.6	65.	.600	86.1	311	..	..	.9	Ci cu., Ci-s., (1) W., (2) SW.
	3 22.	754.35	29.591	72.5	29.700	29.582	...	68.	65.6	.603	86.8	310	..	..	1.0	Ci-cu., Ci-s.
	4 22.6	754.50	29.594	72.6	29.698	29.570	...	67.	65.3	.604	86.	300	..	..	1.0	Ci-cu., Ci-s., SW.
	5 22.5	754.60	29.598	72.1	29.702	29.585	...	67.	65.3	.604	85.8	300	..	..	1.0	Ci-cu., Ci-s., SW.
	6 23.	755.45	29.629	72.3	29.730	29.614	...	68.5	66.1	.613	85.3	300	..	..	1.0	Ci-cu., Ci-s., SW.
	7 23.5	755.85	29.645	72.7	29.764	29.648	...	72.3	68.	.622	84.8	345	..	..	.8	Ci, Ci-s., SW.
	8 24.	756.50	29.664	73.5	29.778	29.658	...	72.4	67.	.597	84.	265	.2	..	.6	Ci, Ci-s., Ci-cu., SW.
	9 24.5	756.50	29.663	74.3	29.776	29.653	92.	73.	67.5	.609	83.5	250	.2	..	.5	Ci, Cu., Ci-cu., W. by S.
	10 25.2	756.60	29.663	75.6	29.778	29.652	92.	74.7	69.2	.647	83.5	240	..	..	.4	Ci, Cu., Ci-cu., W. by S.
	11 25.5	756.50	29.657	76.2	29.776	29.649	98.	77.	70.	.650	80.	275	..	..	.7	Ci, Cu., Ci-cu., W. by S.
	12 26.	756.60	29.660	77.2	29.778	29.648	99.	77.	70.4	.663	80.	260	..	..	.9	Ci, Cu., Ci-cu., W. by S.
	13 26.5	756.85	29.668	78.	29.788	29.655	97.	76.7	69.1	.622	78.	260	.1	..	1.0	Ci, Cu., Ci-cu., W. by S.
	14 26.8	756.35	29.646	78.5	29.770	29.636	94.	76.8	70.7	.677	80.	260	.2	..	.9	Ci, Ci-cu., N., W.
	15 26.5	757.00	29.674	78.5	29.796	29.662	...	74.3	70.6	.700	83.	320	.2	.05	1.0	Ci-cu., N., rain, W.
	16 26.5	757.15	29.680	78.7	29.804	29.670	...	74.3	69.3	.666	84.	275	..	.01	.7	N, Ci, Ci-cu., E., W.
	17 25.2	757.40	29.696	77.8	29.820	29.687	...	74.1	69.4	.669	84.	296	..	..	1.0	N, NE.
	18 25.2	757.65	29.702	77.	29.824	29.694	...	68.5	66.	.610	84.	278	.2	..	1.0	N.
	19 26.	757.60	29.705	77.	29.828	29.698	...	67.	64.5	.589	90.5	268	..	..	1.0	N.
	20 25.	757.80	29.705	76.1	29.828	29.701	...	65.	63.5	.571	91.	260	..	.01	1.0	N.
	21 24.9	759.10	29.763	75.9	29.880	29.753	...	64.	63.5	.582	93.	190	..	.09	1.0	N., raining.
	22 24.3	758.70	29.750	75.1	29.860	29.735	...	62.6	61.7	.544	92.8	266	..	.10	.4	N, Cu., Ci-s.
	23 23.9	758.75	29.754	74.6	29.868	29.745	...	62.3	61.3	.555	92.4	238	..	..	1.0	N, Ci-s.

Observed dew point: 21h.; 63°.

JUNE.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.]

Day.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.			Hygr., Saussure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Hour.	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.	Wet.					
28	0	23.6	758.60	29.750	73.8	29.858	29.736	...	61.9	61.	...	238	...	1.0	N.
	1	23.1	758.55	29.751	73.	29.850	29.731	...	60.8	59.9	...	219	...	1.0	N.
	2	22.8	758.70	29.758	72.5	29.860	29.742	...	60.5	59.6	...	225	...	1.0	N., drizzling.
	3	22.8	758.85	29.764	71.7	29.862	29.747	...	62.	60.	...	225	...	1.0	N., drizzling.
	4	22.6	758.90	29.767	71.3	29.864	29.749	...	60.5	59.5	...	220	...	1.0	N., drizzling.
	5	22.2	759.10	29.775	71.	29.876	29.762	...	60.5	59.5	...	220	...	1.0	N., drizzling.
	6	21.8	759.40	29.790	70.5	29.900	29.788	...	61.	60.	...	220	...	1.0	N.
	7	21.7	760.00	29.814	70.	29.918	29.807	...	61.7	60.2	...	220	...	1.0	N., raining.
	8	21.8	760.15	29.820	70.	29.920	29.809	...	63.6	62.	...	220	...	1.0	N.
	9	21.7	760.10	29.818	69.9	29.920	29.809	...	66.7	61.5	...	220	...	1.0	N., Ci-cu.
	10	22.	759.80	29.805	70.1	29.906	29.795	...	70.4	67.4	...	342	...	.7	Ci., Ci-cu., Cu., W.
	11	22.7	760.00	29.809	71.	29.912	29.798	...	72.8	68.5	...	346	...	.9	Ci-cu., Cu.
	12	23.7	759.50	29.785	72.6	29.896	29.778	96.	76.7	70.5	...	25	...	.8	Cu., Cu-s., N., W.
	13	24.5	759.30	29.773	73.8	29.884	29.763	96.	76.4	69.6	...	40	...	.6	Cu., Cu-s., N., W.
	14	24.6	759.30	29.772	74.5	29.884	29.761	95.5	78.2	69.1	...	35	...	.7	Cu., Cu-s., N., W. [(2) W.
	15	25.7	759.30	29.767	75.3	29.884	29.758	96.	78.	68.	...	70	...	.9	Cu., Cu-s., N., (1) W. by N.,
	16	26.	759.10	29.757	76.3	29.878	29.750	...	77.	68.7	...	85	...	.9	Cu., Cu-s., N., (1) W. by N.,
	17	26.2	758.90	29.750	77.	29.876	29.746	...	79.2	69.8	...	60	...	.1	Cu., Cu-s., N., W. [(2) W.
	18	26.8	758.90	29.747	77.8	29.877	29.744	...	78.2	70.	...	60	...	...	Cu., Ci-cu.
	19	26.5	759.10	29.756	78.	29.882	29.759	...	76.5	69.3	...	55	...	...	Cu. at Hor.
	20	26.	759.50	29.773	77.8	29.900	29.767	...	71.5	67.	...	55	...	...	Ci-s. at Hor.
	21	25.9	759.70	29.782	77.5	29.908	29.777	...	70.	66.7	...	86	...	.1	Ci-s., Cu. at Hor.
	22	24.8	759.80	29.792	76.7	29.910	29.782	...	68.5	66.5	...	18	...	...	Clear.
	23	24.5	759.75	29.791	75.7	29.896	29.770	...	67.	65.5	...	18	...	.1	Ci-s. at Hor.

Observed dew point: 3h., 53°; 9h., 60.3°; 15h., 63° 5; 21h., 62° 9.

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Hygr., Gauss's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.		Dir., degrees.	Force, lbs.			
29	0 24.3	759.80	29.793	75.5	29.996	29.770	...	66.	.600	18	...	...	.6	Cu., Ci-cu.
1	24.2	759.85	29.796	75.	29.998	29.773	...	65.2	.587	18	...	...	.8	Cu., Ci-cu.
2	24.	759.55	29.784	74.4	29.988	29.765	...	66.2	.588	129	...	...	...	Clear.
3	23.8	759.80	29.795	73.8	29.900	29.780	...	65.4	.562	90.	...	...	...	Clear.
4	23.7	760.00	29.805	73.2	29.912	29.793	...	65.	.574	90.	...	...	...	Clear.
5	23.5	760.60	29.829	73.	29.928	29.809	...	64.	.552	89.9	...	...	...	A few Ci., SH.
6	23.5	761.25	29.854	72.9	29.966	29.848	...	68.6	.609	87.	...	...	...	A few Ci., SH.
7	24.8	761.45	29.857	73.2	29.970	29.851	...	71.2	.586	81.	...	...	...	Ci.
8	24.8	761.85	29.873	71.5	29.982	29.859	...	75.	.687	79.	...	...	...	Ci.
9	25.	762.10	29.880	76.	29.994	29.867	92.	77.	.582	73.	...	...	...	Ci. W.
10	25.3	762.35	29.889	76.5	30.004	29.876	93.	77.4	.598	73.	...	...	...	Ci. W.
11	25.9	762.55	29.894	77.1	30.010	29.880	96.	78.6	.585	70.	...	...	...	Ci., Cu., (1) W. by N., (2) W.
12	26.1	762.75	29.901	77.5	30.016	29.885	96.	79.	.587	69.	...	...	...	Ci., Cu., (1) NW., (2) W.
13	26.5	762.90	29.906	78.	30.020	29.891	96.	79.5	.524	66.	...	...	...	Ci., Cu., (1) NW., (2) W.
14	26.9	763.00	29.906	78.5	30.026	29.892	91.	81.	.588	65.	...	...	...	Ci., Cu., (1) NW., (2) W.
15	27.3	763.10	29.908	79.2	30.028	29.893	96.	81.5	.587	63.5	...	...	...	Ci., Cu., (1) NW., (2) W.
16	27.7	763.20	29.910	80.	30.032	29.894	97.	83.2	.589	63.	...	...	...	Ci., Cu., (1) NW., (2) W.
17	28.	763.25	29.911	80.5	30.034	29.895	...	83.4	.579	63.2	...	...	...	Ci., Cu.
18	28.1	763.45	29.919	80.8	30.051	29.910	...	82.5	.635	63.7	...	...	...	A few Ci.
19	28.	763.45	29.919	80.8	30.051	29.910	...	81.	.687	61.	...	...	...	Clear.
20	27.9	763.60	29.925	80.8	30.062	29.921	...	73.5	.570	72.2	...	...	...	A few Ci-s.
21	27.5	763.60	29.927	80.5	30.062	29.923	64.8	70.9	.583	78.	...	...	...	A few Ci-s.
22	25.3	763.85	29.948	79.	30.062	29.927	63.2	68.6	.583	78.	...	...	...	Clear.
23	25.2	764.00	29.954	76.9	30.066	29.936	61.9	67.	.576	158	...	...	...	Clear.

Observed dew point: 3h., 63°; 9h., 66° 4; 15h., 61° 8; 21h. 63°.

June.]

DAILY METEOROLOGICAL OBSERVATIONS.

[1842.

Date.	Barometer No. 1.			Barometer No. 2.			Thermometers, Fah.		Force of vapor, ins.	Hygt., Sausure's.	Wind.		Rain, inches.	Sky covered, 10ths.	Clouds, and direction of their strata.
	Temperature, centigrade.	Obs'd height, millimetres.	Corr. height, inches.	Temperature, Fahrenheit.	Obs'd height, inches.	Corr. height, inches.	Radiation.	Dry.			Dir., degrees.	Force, lbs.			
30	0	24.9	764.05	29.957	76.	30.068	29.941	62.2	66.5	64.5	158	..	..	.05	Cl., Ci.-s.
1	1	24.9	764.05	29.957	76.	30.068	29.941	...	66.	64.	158	..	..	.8	Cu., Ci.-cu.
2	2	23.7	763.70	29.950	75.	30.050	29.925	...	67.6	64.7	167	..	..	.9	Cu., Ci.-cu., N.
3	3	23.3	763.70	29.951	73.5	30.050	29.940	63.	66.5	64.	220	..	..	..	Ci.-cu.
4	4	23.4	763.75	29.953	73.3	30.060	29.940	63.	66.	63.7	220	..	..	..	Ci.-cu.
5	5	23.5	763.85	29.954	73.2	30.066	29.947	63.	65.9	63.7	250	..	..	..	Cu., Ci.-cu., N.
6	6	23.4	764.00	29.963	73.	30.074	29.955	...	67.5	65.1	230	..	..	..	Ci., Ci.-cu.
7	7	24.	764.36	29.973	73.5	30.088	29.968	...	73.3	70.2	230	..	..	.3	Ci.
8	8	25.	764.00	29.955	74.8	30.076	29.953	...	78.8	74.5	340	..	..	..	Clear.
9	9	25.5	763.95	29.950	76.1	30.066	29.939	98.	81.	75.7	350	..	..	.2	Ci., Ci.-cu.
10	10	26.2	763.90	29.946	77.8	30.066	29.934	98.5	83.	76.	25	..	..	.3	Ci., Ci.-cu.
11	11	27.2	764.10	29.948	79.1	30.072	29.937	103.	84.	74.6	15	1.5	..	.8	Ci.-cu., Cu.-s.
12	12	29.1	764.10	29.939	80.5	30.066	29.927	99.7	85.2	74.7	15	1.5	..	.8	Ci., Ci.-cu., Cu.-s.
13	13	28.7	763.40	29.914	81.3	30.040	29.898	99.	86.5	74.3	10	1.5	..	.3	Ci., Ci.-cu., Cu.
14	14	28.6	763.40	29.875	82.	30.004	29.861	100.	86.	74.7	0	1.3	..	.4	Ci., Cu.
15	15	30.3	763.40	29.872	82.5	30.004	29.860	99.	86.7	76.4	722	70.	..	.5	Ci., Cu.
16	16	30.	762.35	29.866	83.8	30.003	29.854	98.	85.7	75.4	752	70.5	..	.1	Cu.
17	17	29.5	761.95	29.854	84.	29.997	29.848	94.	82.9	74.5	340	2.0	..	.2	Ci.-cu., Cu.
18	18	29.8	762.25	29.867	83.9	30.010	29.861	...	80.	73.2	350	1.8	..	.8	Ci.-cu., Cu.
19	19	28.8	762.35	29.867	83.	30.010	29.864	...	78.	70.5	350	1.3	..	1.0	N., Cu.
20	20	28.2	762.45	29.879	82.1	30.018	29.875	...	76.5	71.	350	1.0	..	1.0	N., Cu.
21	21	28.	763.45	29.880	82.	30.018	29.875	...	75.5	70.	340	1.0	..	1.0	N., Cu.
22	22	27.2	763.40	29.881	81.	30.012	29.871	...	74.1	69.3	353	..	..	1.0	N., Ci.-s.
23	23	26.8	762.60	29.892	80.	30.016	29.878	...	73.5	69.4	7	..	..	1.0	N., Ci.-s.

Observed dew point: 3h., 59°; 9h., 74°; 15h., 69°; 21h., 61° 8.

